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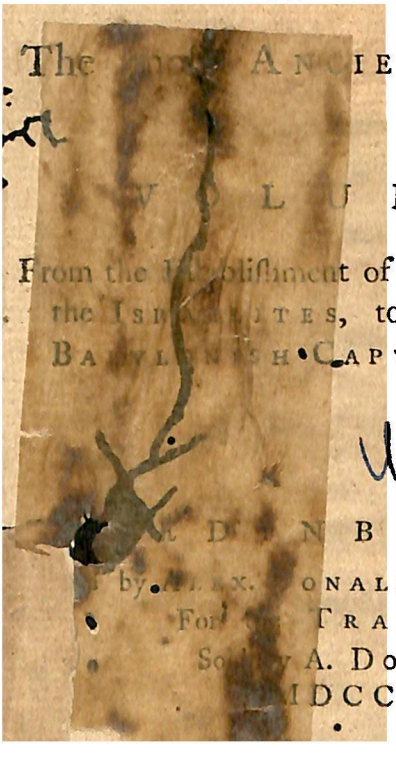
THE ORIGIN OF LAWS, ARTS, and SCIENCES, AND THEIR PROGRESS AMONG The [illegible] ANCIENT NATIONS.

VOLUME III.

From the Establishment of MONARCHY among the ISRAELITES, to their Return from the BABYLONISH CAPTIVITY.



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p. l.
169. 22. *read* were not in uſe
180. 5. *read* I did not pretend
252. note * } *Read*, See the table, p. 341.
254. note * }

CHRONOLOGICAL TABLE for the THIRD PART,

Which comprehends from the Establishment of ROYALTY amongst the ISRAELITES to their Return from CAPTIVITY.

EMPIRES.

Years of the world	Years before J. C.	SACRED HISTORY.		Year before J. C.	EGYPTIANS.	Year before J. C.	BABYLONIANS.	Year before J. C.	ASSYRIANS.	Year before J. C.	MEDES.	Year before J. C.	KINGS of LACEDÆMON.	Year before J. C.	HERACLIDÆ.	Year before J. C.	REPUBLIC OF ATHENS.	
2909. 2934. 2990.	1095. 1070. 1012.	SAUL. 25. years. DAVID. 40. SOLOMON. 39.			Kings uncertain.		These three empires united under the Assyrian government.		Kings uncertain.			1078. 1030. 1029.	E[illegible]thenes... 42. years. A[illegible]... 1. [illegible]trates.. 35.	1[illegible]2.	Procles. Sous. Eurypont. } We know not the precise duration of their reigns.	1095. 1076. 1039. 1020.	*Perpetual ARCHONS.* Medon - - - - 20. years. Acastus - - - - 36. Archippus - - - 19. Thersander - - 41.	
3029. 3029. 3046. 3049. 3090.	975. 975. 958. 955. 914.	*Revolt* and *Schism* of the ten tribes against REHOBOAM. KINGS of JUDAH. REHOBOAM... 17. years. ABIJAM.... 3. ASA..... 41. JEHOSHAPHAT. 25.	KINGS of ISRAEL. JEROBOAM... 20. years. NADAB..... 2. BAASHA.... 24. ELA....... 2. ZIMRI..... 7. days. OMRI..... 12. years. One part of the people follow TIBNI; OMRI reigns alone only four years. AHAB...... 22. years.		SHISHAC plunders the temple of Jerusalem under REHOBOAM. Kings uncertain.				Kings uncertain.			994. 957. 928.	[illegible]as.... 37. years. [illegible]sus.... 29. A[illegible] I... 44.		Prytanis. Eunomes. Polydectes.	979. 948. 918.	Phorbas - - - - - 31. years. Megacles - - - - 30. Diognetes - - - 28.	
3112. 3129. 3120. 3126. 3167. 3194.	892. 885. 884. 878. 839. 810.	JEHORAM.... 8. years. AHAZIAH.... 1. ATHALIAH.... 6. JOASH..... 40. AMAZIAH... 29. UZZIAH.... 52.	AHAZIAH.... 2. years. JEHORAM.... 12. JEHU...... 28. JEHOAHAZ... 17. JOASH...... 7. JEROBOAM II. 17.		Kings uncertain.							884. 844. 800.	A[illegible]... 60. years. T[illegible]cles... 44. Al[illegible]enes... 38.		Ch[illegible]... 64. years. LYCURGUS gives his laws about the year 870. NICANDER.... 39. years.	890. 841. 804.	Pherecides - - - 19. years. Thespius - - - - 37. Agamestor - - - 26.	
3246. 3262. 3277.	758. 742. 727.	JOTHAM.... 16. years. AHAZ..... 16. HEZEKIAH... 29.	*Anarchy.* ZACHARIAH... 7. months. SHALLUM.... 1. MENAHEM.... 10. years. PEKAIAH..... 2. PEKAH...... 20. HOSHEA kills PEKAH. *Anarchy.* HOSHEA. In the ninth year of his reign, SALMANASSAR king of Assyria takes Samariah, and carries HOSHEA and the ten tribes into captivity. Thus ended the kingdom of Israel 254 years after its establishment.	762.	BOCCHORIS.... 20. years. ASYCHIS. SABACOS. SETHON. Kings uncertain.	733. 726. 721. 709. 702.	The Babylonians shake off the yoke of the Assyrians, and from thence form a particular monarchy. The first of these new sovereigns was a prince named NABONASSAR. He mounted the throne in 747 before J. C. and reigned........ 14. years. CINCIRAS.... 5. JUGEUS..... 5. MARDOKEMPAD, otherwise called MERODACH-BALADAN... 12. ARCIANUS.... 5. *Anarchy*..... 2. BELIBUS..... 3.	795. 770. 758. 729. 714. 710.	SARDANAPALUS 15. years. Under this prince the Assyrian empire was dismembered by the revolt of the Babylonians and Medes. PHUL, or NINUS the younger... 12. years. TIGLATH-PILESER, or TILGEM... 29. years. SALMANASSAR. 14. SENNACHERIB. 4. ASSARHADDON. 42.	710.	The Medes withdraw from their subjection to the Assyrians. They remain for some time in a state of *Autonomy*; that is to say, without any form of government; at last they chuse a king, named DEJOCES. *See* b. 1. c. 3. KINGS. DEJOCES.... 35. years.	762. 728.	Pol[illegible]drus.... 34. years. Eu[illegible]rates I.. 28.		Theopompus. Zeuxidamus.	778. 756. 754. 744. 734. 724. 714. 704.	Eschyles - - - - 22. years. Alcmeon - - - - - 2. *Decennial ARCHONS.* Charops - - - - - 10. Esimedes - - - - 10. Clidiques - - - 10. Hippomenes - - - 10. Leocrates - - - - 10. Apsander - - - - 10.	*Commencement of the* [illegible]*piads.* Before I. Olympiad 776. II. - - - - - - - 772. III. - - - - - - 768. IV. - - - - - - 764. V. - - - - - - - 760. VII. - - - - - - 752. X. - - - - - - - 740. XIII. - - - - - - 728. XV. - - - - - - - 720. XVI. - - - - - - 716. XVII. - - - - - 712.
3306.	698.	MANASSEH... 58. years.		687. 685. 670.	*Anarchy.* XII. Kings reign together during....... 15. years. PSAMMETICHUS reigns alone during.... 54. years.	699. 693. 692. 688.	APRONADIUS.. 6. years. RIGABELUS... 1. MESSESSIMORDAC...... 4. *Anarchy*, which continued.... 8. ASSARHADDON king of Assyria takes advantage of this anarchy to seize the throne of Babylon, [illegible] it to that of Assyria.						Anaxander.		Anaxidamus.	694.	Erixias - - - - - 10. years. *Annual ARCHONS.* The most part are unknown or insignificant. It will be sufficient to mention the names of such as make a figure in history.	XXI. - - - - - 696. XXIII. - - - - - 688. XXIV. - - - - - 684. XXV. - - - - - 680. XXVI. - - - - - 676. XXVII. - - - - 672. XXVIII. - - - - 668. XXIX. - - - - - 664.
3361. 3363. 3394. 3394.	643. 641. 610. 610.	AMON....... 2. JOSIAS..... 31. JEHOAHAZ... 1. month. JEHOIAKIM... 12. years.		616. 600.	NECO....... 16. PSAMMIS..... 6.	668. 648. 626. 606.	SAOSDUCHIN.......... 20. years. CHINALADAN, otherwise called SARAC. [illegible] 22. Under this prince, Nineveh, the capital [illegible]syrian empire, is taken by CYAXARES king of Me[illegible] by NABOPOLASSAR satrap of Babylon. This even[illegible]nal end to the Assyrian monarchy. The provinces [illegible]omposed it were divided between the Babylonians and [illegible] NABOPOLASSAR.......... 20. years. NABOCOLASSAR.......... 43. This is NEBUCHADNEZZAR the Great.			657. 635.	PHRAORTES... 22. years. CYAXARES I.. 42. Under this prince the Scythians make an irruption into Asia.		Eurycrates II. Leo[illegible]		Archidamus. Agesicles.	624.	[illegible]raco being archon published his laws.	XXXIX. - - - 624. XLIII. - - - - 608.
3405. 3405. 3416. 3468.	599. 599. 588. 536.	JECHONIAS... 3. months. ZEDEKIAH... 11. years. Taking of Jerusalem by NEBUCHADNEZZAR. This city and the temple are burnt. The inhabitants of Jerusalem and of almost all Judah are carried captives beyond the Euphrates. Thus ended the kingdom of Judah. Cyrus delivers the Jews from captivity. They return into Judea under the conduct of ZEROBABEL, and form, with the permission, and under the protection of the king of Persia, a kind of re[illegible]c, of which the high pri[illegible] the head and chief governor.		594. 569.	APRIES..... 25. years. AMASIS..... 44.	562. 560. 556. 538.	Tyre besieged and destroyed by [illegible] EVILMERODAC. .... 2. years. LABOROSORCOD.......... 6. NABONIDES............ 6. This is the BALTHASAR of [illegible] *Taking of Babylon* by CYRUS.			595. 560.	ASTYAGES... 35. years. This is the AHASUERUS of DANIEL. CYAXARES II.. 59. years. This is the DARIUS the Mede of DANIEL. CYRUS succeeds this prince; he was already king of Persia, having inherited this crown by the death of his father.		Anandrides. Cleomenes.		Ariston. Demaratus.	594.	Solon being archon gives new laws to the Athenians. We do not find, that after this legislator there was any change made in the laws of Athens; those of SOLON maintained their authority as long as the Athenian republic subsisted.	XLVI. - - - - 566. LV. - - - - - 560. LVI. - - - - - 556. LIX. - - - - - 544. LX. - - - - - - 540. LXI. - - - - - 536.
						536.	PERSIA[illegible] EMPIRE. CYRUS maste[illegible]at part of Asia.											

The ORIGIN of LAWS, ARTS, and SCIENCES, and their PROGRESS among the moſt ANCIENT NATIONS.

INTRODUCTION.

THE more we advance towards the times which come near to the birth of Jeſus Chriſt, the more does ancient hiſtory unfold itſelf and become clear. Aſia, in the ages on which we are going to enter, preſents us with the moſt ſtriking ſpectacles. In them we ſee the fall of the four powerful empires, of the Aſſyrians, Babylonians, Medes, and Lydians.

Egypt, that monarchy ſo ancient and ſo celebrated, begins to ſtoop to its decline. We ſhall not here, however, ſee the ruin of it completed. The point of time in which Egypt, expoſed to the ravages of Cambyſes the ſon of Cyrus, beheld the ſubverſion of its throne, and became a province of the Perſian empire, belongs to ages which are not the ſubject of my inquiries. Of this time therefore I am not to ſpeak. I only thought proper to announce it.

Upon the ruins of all theſe different kingdoms aroſe the Perſian monarchy, a nation of which, till this time, there is no notice taken in antiquity. The riſe of this new empire, more extended and more formidable than any of which we have had occaſion to ſpeak, is the term to which we ſhall limit our diſquiſitions.

During theſe ages, there is leſs of grandeur in the images which Europe preſents us. But the abolition of monarchical government in many of the Grecian cities,

then formed into republics, Lycurgus and Solon giving laws, one at Lacedæmon, and the other at Athens, are objects by ſo much the more intereſting, as this epocha is that of the greatneſs and renown which the Greeks acquired in ancient hiſtory.

In the number of famous events belonging to the ages we are going to run over, we ought alſo to reckon the foundation of Rome, a city which ſeems to have been deſtined to ſwallow up and abſorb all the kingdoms of the univerſe. Her feeble beginnings preſaged no ſuch degree of power as ſhe afterwards attained. It was by ſteady policy and unſhaken courage that Rome triumphed over all the obſtacles that appeared to oppoſe her enlargement. This alſo is an object apart, and which we only indicate. The Romans enter not into the plan which we have laid down.

PART III.

From the eſtabliſhment of monarchy among the Iſraelites, to their return from the Babyloniſh captivity, a ſpace of about 560 years.

BOOK I.

Of Government.

I Have reſerved, for this third and laſt part of my work, ſuch reflections, and even ſuch criticiſms, as may be made upon the laws and government of the different people who diſtinguiſhed themſelves in ancient times. So that, after having given an account of all that ancient writers have been able to tranſmit to us in this view, I ſhall propoſe ſome reflections, as well on the particular laws, as on the fundamental principles of all the different forms of government of which I ſhall have had occaſion to ſpeak.

Before I enter upon the ſubject, it may be uſeful to ſpeak a little of the ſtate of the Hebrews in the ages we are now ſurveying. Although I never intended to treat particularly of the hiſtory of this people, I think myſelf obliged to indicate at leaſt the revolution that was then made in the form of their government, and, in few words, to give a general idea of the character of moſt of their ſovereigns.

The Jews, an unſteady and fickle people, were at length weary of having God for their head, and for their immediate monarch. They demanded to be governed external-

ly by a king, and to form a perceptible monarchy the ſame as other nations[a]. It pleaſed the Supreme Being to conſent. It is remarkable, that this innovation happened nearly at the ſame time that moſt of the towns of Greece, on motives not very clear to us, erected themſelves into republics. Saul was anointed King of Iſrael the ſame year that Medon was elected archon of Athens[b].

The Jews had ſufficient reaſon to repent of the novelty they had introduced into the form of their government. The bad conduct of their kings, the revolt of the ten tribes who founded the kingdom of Samaria, and at laſt the total ruin of the nation, were the juſt puniſhments of their inconſtancy. If the names of David, of Solomon, of Jehoſhaphat, and Hezekiah, are reckoned among thoſe of the greateſt kings; it is with horror that we read thoſe of Rehoboam, of Athalia, of Jehoram, and Manaſſeh. The hiſtory of the Jews throughout the whole æra on which we are now employed, is almoſt one continued ſcene of horrible ſpectacles, of bloody tragedies, and the moſt unheard-of crimes. Impiety and idolatry triumphed at Samaria almoſt always, often even at Jeruſalem. The total ruin of the kingdom of Samaria was the firſt blow that this people felt. Their iniquities at length drew down upon Jeruſalem the vengeance of the Moſt High. Nebuchadnezzar was the inſtrument of the Almighty to chaſtiſe an intractable nation, relapſing at every moment into the ſame faults.

It is alſo proper to obſerve, that the kingly government of the choſen people began and ended in the ſpace of time now under conſideration. The captivity recalled the Hebrews to theocracy. At their return from Babylon, they formed, by the conſent and under the protection of the kings of Perſia, a ſort of republic, of which the high prieſt was the head and the principal adminiſtrator[c].

[a] 1 Sam. c. 8. v. 5. [b] Marſham. ſecul 13. p. 326. & 340.
[c] See P. Calmet, diſſert. ſur la police des Hebreux, t. 3. p. 10. &c.

CHAP.

CHAP. I.

Of the Aſſyrians.

THE Aſſyrians, of whom we have ſo long loſt ſight, are at length about to iſſue from obſcurity; yet after but juſt appearing they will fall again into oblivion, never more to emerge. This empire is yet more famous by its fall than by its foundation. We are almoſt as ignorant of the events which occaſioned the ruin of this vaſt monarchy, as we are of thoſe which gave it birth. I ſhall obſerve the ſame method with regard to it as I have followed in the preceding books: I ſhall relate only what ſhall have appeared to me the moſt probable.

The Aſſyrians, after having held the empire of Aſia for many ages, began to loſe ſtrength by the revolt of ſeveral nations. The Medes, formerly ſubjected by Ninus [d], were the firſt to throw off the yoke [e]. We find among the ancients ſo little agreement upon theſe facts, that I ſhall ſay nothing of the circumſtances, nor of the particular conſequences of that revolution. Two famous empires were formed out of the diſmembered parts of the Aſſyrian monarchy, that of the Babylonians and that of the Medes. Notwithſtanding this blow, the throne of Nineveh ſubſiſted ſtill ſome time with great luſtre [f]. The names and actions of the monarchs who filled it till its entire deſtruction, are handed down to poſterity. We know of their ravages in Judea. The ſacred books are not the only ones that make mention of it. Profane hiſtorians inform us, that, even after the revolt of the Medes, the Aſſyrian monarchs were ſtill very powerful.

Herodotus tells us, that Phraortes, king of the Medes, having declared war againſt the Aſſyrians, periſhed in that

[d] Diod. l. 2. p. 114. Juſtin. l. 1. c. 3.
[e] Herodot. l. 1. n. 95.; Diod. l. 2. p. 137.;
[f] Herodot. l. 1. n. 102.

enterpriſe

enterpriſe with the greateſt part of his troops [g]. The ſame author, ſpeaking of Sennacherib whom he intitles King of the Arabians and Aſſyrians, ſays that he marched to attack Egypt at the head of a formidable army [h]. It appears even that Aſſaradon, the ſon and ſucceſſor of Sennacherib, took the advantage of an interregnum of eight years which happened at Babylon, to reunite that kingdom to the throne of Aſſyria [i]. This new empire ſubſiſted thus during 54 years. It ſunk at laſt never more to ariſe.

Cyaxares, king of the Medes, having drawn into his party Nabopolaſſar, governor of Babylon, laid ſiege to Nineveh, took and entirely demoliſhed it [k]. The deſtruction of Nineveh put an end to the kingdom of Aſſyria. It was for ever deſtroyed. Even the name of it was loſt. From this moment, hiſtory makes no more mention of the Aſſyrians. Their monarchy was divided between the Babylonians and the Medes. This event happened in the year 626 before the Chriſtian æra [l].

CHAP. II.

Of the Babylonians.

THE hiſtory of the ſovereigns of Babylon is not much better known to us than that of the monarchs of Aſſyria. The example of the Medes, who ſhook off the

[g] Herod. l. 1. 95. [h] L. 2. n. 141.

[i] Here is the proof. It is certain, from ſcripture, that Eſarhaddon ſucceeded Sennacherib his father, King of Aſſyria. 2 Kings c. 19. v. 37.

Again, we find Aſſaradin in the canon of Babylon, compoſed by Ptolomy. We ſee moreover, that the reign of this Aſſaradin had been preceded by an anarchy of eight years; from which I am led to ſuſpect that the Aſſaradin of Ptolomy is the Eſarhaddon of the ſcripture, and that it was by right of conqueſt that he mounted the throne of Babylon, having without doubt taken advantage of the troubles which an interregnum of eight years had occaſioned in that empire.

[k] Tobit, c. 14. v. 14. edit. of the LXX.; Nahum, c. 2. v. 8. 10. 13. c. 3. v. 7.; Sophon. c. 2. v. 13. 15.; Ezekiel, c. 31. v. 3. and following; Herod. l. 1. n. 106. Strabo, l. 16. p. 1071.; Alex. Poly-hiſt. apud Syncell. p. 210.

[l] See the hiſtory of Judith, by F. Montfaucon, p. 245.

yoke

yoke of the Aſſyrians, was followed by many other people dependent upon that crown [m]. The Babylonians were not the laſt to take advantage of the ſhock which the revolt of the Medes had given to the power of the Aſſyrians. We ſee that ſoon after the time in which we conjecture that revolution to have happened, the Babylonians formed a ſeparate monarchy from that of the Aſſyrians. The founder of this new race of ſovereigns was a prince named Nabonaſſar [n]. He it is who occaſioned that famous epocha, known in antiquity by the name of the æra of Nabonaſſar. It anſwers to the year 747 before Jeſus Chriſt.

From this time Babylon had always its particular kings, independent on thoſe of Aſſyria. The diſtinction of the two monarchies is expreſsly marked in the ſacred records. We find a Berodach-Baladan, whom the ſcripture intitles King of Babylon, ſending ambaſſadors to Hezekiah, in the time of Sennacherib King of Aſſyria [o]. We have already related how Eſarhaddon, ſovereign of Nineveh, availed himſelf of an anarchy of eight years into which Babylon had fallen, to repoſſeſs himſelf of the ancient domain of the monarchs of Aſſyria [p], and how ſome time after, Nabopolaſſar, ſatrapa, or viceroy of Babylon, being in league with the King of the Medes, deſtroyed Nineveh, and overturned the Aſſyrian empire [q]. After that event, the Babylonians exalted themſelves to the higheſt degree of power. Yet their glory was but tranſitory. After 88 years of ſplendor, this empire was deſtroyed by Cyrus. Babylon was then confounded in the vaſt Perſian monarchy to which Cyrus gave birth.

I have ſaid, and I repeat it, the hiſtory of Aſſyria and of Babylon is known to us ſcarce at all. Originally diſtinct, afterwards united, then alternatively ſeparate and reunited, theſe two empires proceed upon the ſame line. The ſame events, the ſame obſcurity, almoſt every thing

[m] Herod. l. 1. n. 95. [n] Canon. Ptolem. aſtron.
[o] 2 Kings c. 20. v. 12.; 2 Chron. c. 32, v. 31. [p] Supra, p. 6.
[q] Supra, ibid.

is common to both people. We are ignorant of the greateſt part of their laws and of their cuſtoms[r]. We want thoſe facts, thoſe details, which alone can ſerve to characteriſe a people, and make known their politics, the genius and principles of their government. We muſt content ourſelves therefore with a vague knowledge, too uncertain indeed to gratify our curioſity fully, but which is nevertheleſs ſufficient to give us a very great idea of the empires of Aſſyria and Babylon.

In effect it is certain, that the Aſſyrians and the Babylonians founded in Aſia two the moſt extenſive monarchies of antiquity. The holy ſcripture and profane hiſtory always ſpeak of them as of two formidable powers. Beſides, what we read of the grandeur and opulence of Nineveh and Babylon, is a very ſolemn evidence of that degree of glory and exaltation to which theſe two empires had attained. Finally, we ſee, that, amongſt both theſe people, the arts were flouriſhing, and the ſciences greatly cultivated. All this is enough to aſſure us that the Babylonians and Aſſyrians had made a great progreſs in politics, and in the art of government.

CHAP. III.

Of the Medes.

WE have a pretty juſt knowledge of the manner in which political government was eſtabliſhed among the Medes. Theſe people, after their revolt from the kings of Aſſyria, did not immediately form a monarchical body. They remained ſome years in a ſtate of autonomy, as Herodotus calls it[s]. Haraſſed all this time with diſſenſions and domeſtic miſeries, they were ſoon obliged to call a general council to deliberate on the means of reducing their ſtate to order, and introducing civil government.

[r] See part 1. b. 1. c. 1. art. 3.

[s] L. 1. n. 96.

They

They could think of no better way than electing a king. The choice fell upon Dejoces, a perſon greatly diſtinguiſhed by his prudence, his equity, and the integrity of his manners [t].

This new ſovereign conducted himſelf ſo as to juſtify the choice of the Medes. His firſt care was to annex to the dignity of king whatever external marks might heighten the luſtre of it, and to ſecure his perſon from inſult and from outrage. He began by commanding that they ſhould build him a houſe worthy of a ſovereign. He himſelf laid out the ground, and cauſed it to be lined with good fortifications. He then demanded guards for the ſafety of his perſon. The Medes obeyed, the palace was raiſed upon the ſpot, and in the manner that Dejoces had ordered, and his guards were choſen by himſelf [u].

After having taken all proper meaſures for the ſafety of his perſon, and the maintenance of his dignity, Dejoces next applied himſelf to the proviſion of civil policy. Till his acceſſion to the crown, the Medes had lived diſperſed in ſmall towns and villages, remote and ſeparate from each other [x]. Dejoces commanded them to build a city which ſhould be large enough to contain a conſiderable number of families. In order to engage them to this, he made them ſenſible of the advantage of dwelling in a place fortified and ſecured from the inſults of an enemy. They choſe a ſituation in which art had only to aſſiſt nature. The city was ſoon built. It is that which was known among the ancients by the name of Ecbatana. It was encompaſſed with ſeven walls. The innermoſt incloſed the palace of the king, and there his treaſurers were depoſited [y].

As ſoon as the city was fit to receive inhabitants, Dejoces obliged a part of the Medes to ſettle in it. He then gave all his attention to draw up laws and to maintain order and civil policy throughout his dominions. As he had to deal with a ferocious people, from whom he had every thing to

[t] Ibid. and following.
[u] Herod. l. 1. n 98.
[x] Ibid. n. 96.
[y] Ib. n. 98.

fear, he thought no precaution too much to inſpire them with fear and the reverence due to the throne. Perſuaded that the more ſubjects are kept at a diſtance, the more reſpect they will pay their ſovereigns [7], he raiſed, ſo to ſpeak, a wall of ſeparation between him and his people. He ordered, that none ſhould preſent themſelves before the King, without being introduced by officers appointed for that purpoſe, and no perſon was allowed to look him in the face. Thoſe even who had the privilege of approaching him, were not to laugh or to ſpit in his preſence [8]. All affairs were managed by the interpoſition of third perſons. It was from the centre of his palace that Dejoces ſaw all that paſſed in his dominions. Law-ſuits were diſcuſſed before him by writings only; and when he had given judgment, it was alſo in that manner that he notified it to the parties. Above all, he applied himſelf ſteadily to the ſtrict adminiſtration of juſtice. He aſſerted the authority of the laws by the moſt ſevere and moſt rigorous puniſhments, judging nothing more eſſential to the ſupport of an infant ſtate. As ſoon as he was informed of any injury done, he cauſed the aggreſſor to be brought before him, and impoſed a penalty proportioned to his fault. For this purpoſe, he had perſons of confidence appointed in all his provinces, who had their eyes upon the great, and made their reports to him when the weaker ſort were oppreſſed [9].

It appears by what we have ſaid, that the government of the Medes was purely monarchical. The conduct of Dejoces gives us the idea of a great politician. I do not know however, that every part of it deſerves approbation. We cannot but commend the meaſures he had taken to give to royalty an exterior appearance capable of ſtriking the imagination, and proper to inſpire his new ſubjects with an idea, that their ſovereign was a being different from other men. It was to be feared, that too great familiarity might have

[7] *Major e longinquo venit reverentia.* Tacit.

[8] Herod. l. 1. n. 99. In the Indies it is not permitted to ſpit in the palace of the king. Voyage of Le Blanc, p. 182.

[9] Herod. l. 1. n. 100.

drawn

drawn him into contempt, and have given room for plots againſt an authority yet in its infancy. But can we equally approve the affectation of keeping himſelf always ſhut up in his palace, and rendering himſelf in ſome ſort inviſible? a conduct which has been but too much imitated by the eaſtern monarchs. It was, as is ſaid by a ſublime genius of our times, the very worſt courſe theſe monarchs could have taken. They wanted to procure reverential awe to themſelves, but they procured it to the royal dignity, and not to the king. They fixed the attention of their ſubjects to a certain throne, and not to a certain perſon. That inviſible power which governs, is always the ſame for the people. Let ten kings be dethroned and murdered, one after another, they are ſenſible of no difference. It is as if they had been governed ſucceſſively by ſpirits [c].

I know not whether we ought to impute to Dejoces one of the moſt capital defects which can be objected to the principles of the government eſtabliſhed among the Medes. The power of a legiſlator is imperfect when he has not the power of abrogating a law which he had the power of making. Such, however, were the bounds of the ſovereign authority among the Medes. Having once publiſhed an edict, it was not in the power of the king to change or to revoke it [d]. I cenſure equally another cuſtom of theſe people, that of confiding the education of their monarchs to women only, and to eunuchs [e]; a cuſtom always practiſed, and ſtill in uſe in the eaſt.

For two hundred years, the Median throne ſubſiſted with conſiderable ſplendor. It then ſubmitted to the fortune of Cyrus, and was abſorbed in the vaſt monarchy of the Perſians.

[c] Lettres Perſanes, let. 100.
[d] Dan. c. 6, v. 15.
[e] Plato de leg. l. 3. p. 815.

CHAP. IV.

Of the Egyptians.

FRom the time of Seſoſtris to that of Bocchoris, that is to ſay, for near nine hundred years, Egypt furniſhes nothing for the preſent object of our reſearches. Not that in that time it had ſuffered any fatal blow or diminution. We ſee by Homer and by Herodotus, that, in the time of the Trojan war, Egypt was very flouriſhing [f]. The holy ſcripture gives us the ſame idea of it in the time of Solomon and his ſucceſſors [g]. But we have no particulars remaining, either of the events which happened in Egypt during theſe nine ages, or of the actions of the monarchs who occupied that throne during this long interval [h].

The reign of Bocchoris puts an end to this obſcurity. This prince has deſerved an honourable place in hiſtory from the wiſdom of his inſtitutions. The Egyptians have put him into the number of their legiſlators [i]. This is making a grand elogium; for in all that long ſucceſſion of kings which occupied the throne from the deluge to the time that Egypt fell under the dominion of the Perſians, there are only five whom the Egyptians have honoured with the title of legiſlators, Mneves, Saziches, Seſoſtris, Bocchoris, and Amaſis [k]. Hiſtory has preſerved nothing relating to the laws of the two firſt of theſe monarchs [l]. As for Seſoſtris, I have elſewhere given a very circumſtantial ac-

[f] Odyſſ. l. 4.; Herod. l. 2. n. 112. *&c.* [g] 1 Kings c. 9. v. 16.

[h] We know only that Shiſhak pillaged the temple of Jeruſalem in the time of Rehoboam.

[i] Diod. l. 1. p. 106. [k] Diod. ibid.

[l] See what we have ſaid of Mneves, part 1. b. 1. art. 4. p. 45. All that we know of Saziches is, that he added ſome particulars to the eſtabliſhed laws, and that he applied himſelf to the improvement of the worſhip of the gods. Diod l. 1. p. 106. We do not ſo much as know in what age this prince may have lived.

count

count of the political inſtitutions attributed to this prince [m]. It remains only therefore that I lay before the reader what I have been able to collect upon the laws of which Bocchoris and Amaſis are ſuppoſed to be the authors. I ſhall ſpeak alſo of ſome other ſovereigns whoſe regulations have reached to us, although theſe princes have not been put into the number of thoſe whom Egypt ſpecially regarded as her legiſlators.

Bocchoris, a wiſe and able prince [n], but of a harſh and ſevere character [o], mounted the throne about 762 years before the birth of Jeſus Chriſt. It is he who is ſaid to have regulated the rights of the ſovereign, and all that regards the form of contracts and of covenants [p]. To him alſo are attributed the firſt laws on commerce [q]. They ordained that whoever ſhould deny that he owed a ſum of which the lender could produce no written proof, ſhould be free from the debt upon taking an oath. As for thoſe who lent their money upon ſecurity, they were not allowed to make the intereſt amount higher than the principal.

Till the time of Bocchoris the laws of Egypt impowered a creditor to impriſon his debtor [r]. We know that Seſoſtris, on his acceſſion, paid the debts of a great number of people detained in priſon at the ſuit of their creditors [s]. Bocchoris abrogated that cuſtom. He permitted the creditor to ſeize only the goods of his debtor for payment, but forbade perſonal arreſts, and actions againſt the body of the debtor [t]. Solon had this law in view when he eſtabliſhed at Athens what was called the *Seiſachthia*; a law which took from the creditor the power of compelling payment by ſeizing the body of the debtor [u]. Diodorus Sicilienſis adds, that the other legiſlators of Greece were blamed, for that having prohibited a man who had lent a ſum of money to another, from ſeizing his arms or his plough, they yet permitted

[m] See part 2. b. 1. chap. 2. [n] Diod. l. 1. p. 75. [o] Plut. t. 2. p. 529. E.
[p] Diod. l. 1. p. 106. [q] Diod. l. 1. p. 92. [r] Diod. ibid.
[s] Diod. l. 1. p. 63. [t] Diod. ibid. p. 90.
[u] Diod. l. 1. p. 90.; Plut. in Solon. p. 86. D.

mitted him to ſeize the man himſelf for payment of his debt [x].

Bocchoris had ſo much excelled in that part of government which regards the adminiſtration of juſtice, that many of his ordinances and deciſions ſubſiſted and were ſtill obſerved even when the Romans were maſters of Egypt [y].

Next to Bocchoris I ſhall place Aſychis, of whom Herodotus gives us a law reſpecting loans which is ſingular enough. We have ſpoke elſewhere of the care which the Egyptians took to embalm their dead, and of their general cuſtom of preſerving them in apartments deſtined to that uſe [z]. To favour commerce by facilitating credit, Aſychis made a law which permitted them to give the bodies of their fathers in pledge for money borrowed [a]. But by the ſame law it was provided, that the debtor ſhould be deprived of the honours of ſepulture, if he happened to die without having taken up this precious pledge [b]. We ſhall be ſenſible of the efficacy of this puniſhment, if we call to mind what has been ſaid elſewhere of the light in which the funeral rights were conſidered by the Egyptians [c].

Soon after the time of theſe monarchs, Egypt experienced one of thoſe cataſtrophes to which all ſtates are expoſed. It was invaded by Sabacos, King of Ethiopia, who poſſeſſed himſelf of the kingdom, and reigned fifty years [d]. This revolution was only tranſitory. That prince giving up his

[x] Diod. p. 99.
[y] Diod. p. 106.
[z] Diod. l. 1. p. 102.; Lucian. de luctu, n. 21. t. 2.; Joan. Damaſcen. orat. 1. p. 932. de imag. p. 714.
[a] Herod. l. 2. n. 136. [b] Herod. *loco citato.* [c] Part 1. b. 1.
[d] Herod. art. 4. p. 55 n. 137.; Diod. l. 1. p. 75.
If we may believe Julius Africanus, Sabacos ſucceeded immediately to Bocchoris, whom he took and cauſed to be burnt alive. *Apud* Syncell. p. 74. Diodorus places the reign of Sabacos a long time after that of Bocchoris, l. 1. p. 75. Herodotus, whoſe ſuffrage is of ſo great weight in all that concerns Egypt, makes no mention at all of Bocchoris, and makes Sabacos reign immediately after Anyſis the ſucceſſor of Aſychis, l. 2. n. 137. Some modern chronologiſts believe, that the Aſychis of Herodotus and the Bocchoris of Diodorus are one and the ſame perſon under two different denominations. This is one of thoſe critical queſtions which I ſhall not undertake to clear, much leſs to decide.

conqueſt

conqueſt of his own accord, abdicated the throne, and returned into Ethiopia. Sabacos may with juſtice be numbered among the legiſlators of Egypt. Naturally of a mild and humane character, he aboliſhed capital puniſhments, and ordained that ſuch criminals as were judged worthy of death, ſhould be employed in the public works. He thought that Egypt would draw more profit and advantage from this kind of puniſhment, which being impoſed for life appeared equally adapted to puniſh crimes and to repreſs them [e].

Some time after Sabacos, Pſammetichus mounted the throne. This prince made a conſiderable change in the ancient maxims of the government. Till that time other nations were barred acceſs to Egypt [f]. At the city of Naucrates only they were allowed to land and trade [g]. The Egyptians even, if we believe ancient writers, were accuſtomed to kill or make ſlaves of all the ſtrangers they caught upon other parts of their coaſts [h]. Pſammetichus laid down very different maxims. He opened his ports to the commerce of all nations, favoured navigation in his ſeas, and granted all ſorts of privileges to all perſons who choſe to ſettle in Egypt [i]. This prince was fond of the Greeks, and protected them in a particular manner. He owed his preſervation and re-eſtabliſhment to the Ionians and the Carians [k]. Not content with recompenſing them liberally, he determined to ſettle them in his dominions; and for their encouragement, he diſtributed among them conſiderable heritages of land [l]. He even gave them young Egyptian children to be brought up under their tuition, with orders to teach them the Grecian language [m]. Pſammetichus went ſtill farther; he would have the princes his children educated in the Grecian manner [n], and even allied himſelf by treaty with the Athenians and other ſtates of Greece [o].

[e] Herod. Diod. *locis citat.*
[f] Herod. l. 2. n. 154.; Diod. l. 1. p. 78.; Strabo, l. 17. p. 1142.
[g] Herod. l. 2. n. 179. [h] Diod. p. 78. & 80. [i] Diod. ibid.
[k] Herod. l. 2. n. 152. 153.; Diod. l. 1. p. 77.
[l] Herod. n. 158.; Diod. p. 78. [m] Diod. ibid. [n] Diod. ibid.
[o] Herod. l. 2. n. 154.; Diod. l. 1. p. 78.

Amaſis,

Amaſis, one of the ſucceſſors of Pſammetichus, conducted himſelf upon the ſame principles. He conferred many benefits upon the Greeks, and gave them an eſtabliſhment in the city of Naucrates. Such of them even as came to Egypt only to traffic, were in certain places allowed to erect altars and temples [p].

By the wiſdom of his government, Amaſis merited a place in the number of the Egyytian legiſlators [q]. He is ſaid to have made new regulations for the repartition of the provinces, and even to have given the finiſhing ſtroke to the form of the government [r]. Under his reign Egypt was perfectly happy, and was reckoned to contain twenty thouſand cities, all very populous [s]. To maintain order among ſuch a prodigious number of inhabitants, Amaſis made a law of which we cannot too much admire the wiſdom. This law obliged every individual to make a declaration every year before the governor of the province, of his name, his profeſſion, and the means of his ſubſiſtence. Whoever failed in the ſatisfaction of this law, or made a falſe declaration, whoever could not make it appear that he ſupported himſelf by honeſt means, was puniſhed with death [t]. Herodotus and Diodorus ſay, that Solon borrowed this law from the Egyptians, and eſtabliſhed it at Athens [u]; where, in the time of Herodotus, it ſtill ſubſiſted in all its force. But other authors with more juſtice, and on better grounds, attribute the eſtabliſhment of this law to Draco [x], anterior to Solon by ſome years. This law was alſo in uſe among ſeveral other nations [y].

Amaſis ought to be conſidered as the laſt ſovereign of the ancient Egyptian monarchy. Nay, if we believe Xenophon, he was himſelf ſubjected by Cyrus [z]. But it was not till the reign of Pſammenitus, his ſon, that Cambyſes over-

[p] Herod. l. 2. n. 178.
[q] Diod. l. 1. p. 106. [r] Diod. ibid. [s] Herod. l. 2. n. 177.
This fact appears to me much exaggerated. See the memoirs de Trevoux, January 1752, p. 30. & 31.
[t] Herod. l. 2. n. 177.; Diod. l. 1. p. 83. [u] *Loco cit.*
[x] See Marſh. p. 594. 595.
[y] See Perizon. *ad* Ælian. var. hiſt. l. 4. c. 1. p. 328. [z] Marſh. p. 588.

turned

turned the throne of the kings of Egypt, and that this renowned and flouriſhing country became only a province of the vaſt Perſian empire. Egypt never retrieved this mortal blow. That kingdom paſſed ſucceſſively under the dominion of the Greeks and Romans. Theſe events are only pointed at here. Their recital belongs to ages beyond the limits that I have preſcribed myſelf.

In ſpeaking of the civil inſtitutions and politics of the Egyptians, I have hitherto contented myſelf with relating facts ſimply as I found them in ancient hiſtorians. Now that I think I have already laid before the reader every thing belonging properly to that object, it is time to propoſe ſome reflections on the political conſtitution and laws of that monarchy.

All antiquity is agreed in heaping eulogies on the Egyptians for the wiſdom of their government. The moſt renowned perſonages of Greece, thoſe whoſe parts and prudence are the moſt boaſted, travelled into Egypt, to inſtruct themſelves in the laws and cuſtoms of that nation [a]. The Grecian legiſlators drew from that ſource their rules and principles of government [b]. Modern writers have not only adopted the ſuffrage of the ancients; they have even gone beyond them in the matter: nothing can equal the idea they give us of Egypt. According to them, this country ſeems to have been once inhabited only by ſages. We could not receive a more pleaſing image from a republic of philoſophers. But is not this picture rather too highly finiſhed? Ought we not to bate a little of the high opinion commonly entertained of the politics of the Egyptians, and of the wiſdom of their laws? We ſhould examine into this without partiality and without prejudice.

Among the number of laws for which the Egyptians have deſerved ſo much praiſe, I certainly ſhall not place that concerning thieves. They were ordered to inrol their names under a chief, and to carry directly to him whatever

[a] Diod. l. 1. p. 79. 80. 107.

[b] Ibid. & p. 100.; Iſocrat. in Buſirid. p. 329.; Strabo, l. 10. p. 738. D.; Plut. t. 1. p. 41. F.

they ſhould ſteal. Every one was ſure to recover the goods he had loſt, provided he could deſcribe the number and quality of them, and fix upon the time and place where the theft was committed. A fourth of the value was left with the corps by way of ranſom [c]. This regulation which does no great honour to the wiſdom of the Egyptians, has been attempted to be excuſed. * The legiſlator, ſay they, finding that he could not prevent ſtealing, wanted to furniſh his countrymen with an eaſy expedient for recovering what had been ſtole from them [d]. But if we cannot entirely root out that wicked propenſity of mankind to appropriate the goods of their neighbour, at leaſt we ought not to authoriſe it; and ſurely this law had a direct tendency to it. Thieves were not only ſecure of impunity, but of reward alſo.

The Egyptian policy may be taxed upon a better foundation with the exorbitant power they had ſuffered to fall into the hands of their prieſts. Judges of the nation and maſters of all affairs [e], they poſſeſſed both temporal and ſpiritual authority. The ſovereign himſelf was in ſome ſort ſubordinate to them. His conduct from day to day was ſubject to their cenſure; and they had alſo the right of giving him advice [f], and of directing all his actions. This is not all: by the primitive conſtitution of the monarchy, the throne of Egypt was hereditary; but it ſometimes happened that the reigning family became extinct, and in that caſe the crown was made elective. The choice of the new monarch was limited; they were obliged to take him either from the body of prieſts, or from the ſtate military: if the choice fell upon one of the laſt, he was obliged immediately to procure admiſſion into the ſacerdotal order [g]. But a prieſt in the like circumſtance had no ſuch obligation to the military order; ſo great a veneration had the Egyptians for their prieſts, the ſole depoſitaries of the laws and of the ſciences of the nation.

[c] Diod. l. 1. p. 90.; A. Gellius, l. 11. c. 18. p. 540. 541. [d] Diod. l. 1. p. 91.
* See part 1. b. 1. art. 4. [e] Diod. l. 1. p. 81. 84.
[f] Plato in polit. p. 550. B.; Plut. t. 2. p. 354.

We

We muſt be ignorant of the nature of mankind, if we do not perceive the inconveniencies of ſuch a maxim. So much power, ſuch flattering diſtinctions could not but encroach upon the ſovereign authority, and inſpire the prieſts with contempt for the reſt of the nation, a contempt which muſt neceſſarily prove detrimental to the ſtate. Herodotus gives us a very ſtriking example of it in the reign of Sethon, prieſt of Vulcan, who was elected king ſome time after Sabacos [g].

Sethon was ſcarce well ſettled on the throne, when he began his ill treatment of the military, as if he ſhould never have occaſion for their ſervice, and even went ſo far as to deprive them of the heritages of land granted them by the kings his predeceſſors [h]. Sethon had ſoon cauſe to repent a conduct ſo imprudent. Sennacherib, King of Aſſyria, turning his arms againſt Egypt, there was found not a man among the nobles or the military ſtate who would take arms. Sethon ſaw himſelf reduced to make head againſt the enemy with an army raiſed in haſte, and compoſed of artiſans, workmen, and people of the meaneſt profeſſions [i]. He had been ruined, if Sennacherib had not got news of the approach of Tirhakah, King of Ethiopia, who was marching to the ſuccour of Egypt at the head of a powerful army [k]. The prieſts, whoſe intereſt it was to make the moſt of an event which ſeemed to juſtify the conduct of Sethon, did not fail to give out, that Sennacherib was repulſed by a miraculous voice. They even invented a fable which attributed all the glory of it to Sethon [l], but which is not worth examining. This example is ſufficient to ſhew the bad effects of the too great privileges and diſtinctions enjoyed by the prieſts in Egypt.

I go on to the moſt important article of the Egyptian politics. The whole people was divided into a certain number of claſſes [m]. Profeſſions were hereditary in every family;

[g] Herod. l. 2. n. 14. [h] L. 2. n. 14. [i] Id. ibid.
[k] Joſ. antiq. l. 10. c. 1.; 2 Kings c. 19. v. 9. [l] Herod. l. 2. n. 141.
[m] See part 2. b. 1. c. 2.

the ſon being obliged to embrace that of his father [m]. The two principal bodies of the ſtate, the military and ſacerdotal, were kept ſo ſeparate and diſtinct, that a perſon of the ſacerdotal race could not enter into the military ſtate, and reciprocally no perſon of a military family could be admitted into the order of the prieſts [n]. This inſtitution has been much praiſed. I am very far from paſſing ſuch a judgment on it; on the contrary, I think it one of the moſt blameable and moſt pernicious. As we have here under conſideration an eſſential point, a principle highly intereſting to the happineſs and ſupport of ſtates, it were good to examine and diſcuſs with attention the advantages and inconveniencies which may reſult from the eſtabliſhment of profeſſions hereditary in families.

It may be alledged in favour of hereditary profeſſions, that we make that beſt which we have always ſeen made, and which has employed us ſolely from our infancy; we acquire, of conſequence, a much greater facility of excelling in an art; every one adds his own proper experience to that of his anceſtors; by which means every art and every ſcience muſt certainly be carried to the higheſt degree of perfection. Beſides, this cuſtom extinguiſhes all inordinate ambition; every one remains content in his ſtation, and never deſires to quit it by aſpiring to a rank of more elevation. Theſe are nearly all the advantages of hereditary profeſſions; at the firſt glance, we are inclined to favour them. I think, nevertheleſs, that theſe reaſonings are more ſpecious than ſolid. Placing the matter in a truer light, we ſhall ſay, that ſuch an inſtitution is entirely contrary to ſound politics, and to the fundamental maxims of ſociety.

That noble ambition which is the animating ſoul and ſubſiſting principle of ſtates, can never be found in countries where profeſſions are hereditary. This is the way to deſtroy all emulation. Let it not be ſaid, that every man will exerciſe his own profeſſion the better, for that he cannot leave it to embrace another. I aſſert, that he will exer-

[m] Ibid. [n] Diod. l. 1. p. 84, 85.

ciſe

ciſe his profeſſion the better, when by excelling in it he may hope to attain to another more elevated. Beſides, who does not ſee that genius and talents are fettered by this maxim? Such a one may be naturally unqualified for the profeſſion to which he is doomed, who perhaps would have excelled in another had the choice been referred to his diſpoſition. Theſe reflections might be carried much farther; but as, in ſuch ſort of queſtions, experience proves more than reaſoning, let us caſt our eyes upon thoſe nations who have diſtinguiſhed themſelves the moſt by the lights of their mind, and by the extent of their knowledge. We ſhall ſee, that it is not among the nations where profeſſions were hereditary, that the arts and ſciences have made the greateſt progreſs.

This cuſtom did not prevail in Greece; yet what a difference there is between the productions of the Greeks and thoſe of the Egyptians? Let the admirers of ancient Egypt extol as much as they pleaſe, thoſe enormous maſſes for which it is ſtill famous. I ſhall do juſtice to the grandeur of thoſe undertakings, and to the ſolidity of their execution. I admire the pyramids and obeliſks, when I conſider the expenſe, the patience, and the indefatigable labour which the conſtruction of theſe monuments muſt have coſt; but I am not equally touched with the taſte and genius of the artiſts. I ſhall ſay the ſame thing of the ſciences of which the Egyptians may have given the firſt tincture to the Greeks, but which theſe laſt carried to a point at which they never arrived in Egypt. A parallel between the Romans and Egyptians is not leſs unfavourable to the latter, although the arts and ſciences are by no means the moſt ſhining part of the Roman character *.

Let us take a view of the nations that ſubſiſt at preſent, and make the ſame compariſon among them. Two famous ſtates preſent themſelves in Aſia; the Indians and the

* *Orabunt cauſas melius; cœlique meatus*
Deſcribent radio, et ſurgentia ſidera dicent:
Tu regere imperio populos, Romane, memento,
(Hæ tibi erunt artes), pacique imponere morem, &c. Æneid. l. 6.

Chineſe.

Chineſe. In the Indies, the ſon is obliged to follow the profeſſion of his father [o]. In China it is otherwiſe [p]. I am not more a partiſan of the Chineſe than another, and I am very far from looking upon them in the light in which ſome authors would place them. Nevertheleſs, we muſt allow, that none of the Aſiatics can be compared with them; and that the arts and ſciences are far enough from being as flouriſhing in the Indies as they are in China. I might bring in the Arabians in ſupport of my aſſertion, if I wanted to enlarge upon the matter; but I ſhall cloſe it with affirming, that not one nation can be cited, who kept their profeſſions hereditary, and at the ſame time diſtinguiſhed themſelves by talents and by knowledge. I ſay, on the contrary, that this inſtitution is only fit to contract the genius, and to arreſt it in the progreſs it would otherwiſe make. This is moreover the leaſt of the grievances which reſult from hereditary profeſſions. We ſhall make it appear, that the like maxim muſt infallibly draw on the ruin of a ſtate where it has place.

Daily experience proves, that families multiply unequally in all countries. It may happen, that one tribe may multiply to infinity. In that caſe, thoſe who compoſe it having only one and the ſame trade to ſubſiſt by, will fall into poverty, and will become not only uſeleſs, but even chargeable to the ſtate. On the other hand, many uſeful and eſſential arts are in danger of being loſt by the decay of the tribes who are the depoſitaries of them. Beſides, new neceſſities and new diſcoveries are conſtantly giving birth to new arts. How ſhall theſe arts be cultivated in ſtates where every family is attached to a certain profeſſion? It will be neceſſary then at every turn to create new tribes, and aſſign new ranks. Finally, there are arts which aboliſh themſelves by our being experimentally convinced of their little utility. What will then become of the families which were the depoſitaries of them? and how will they be able to ſubſiſt and maintain themſelves?

[o] Lett. édif. t. 5. p. 18. 19. [p] Lett. édif. t. 24. p. 40.

However

However great theſe inconveniencies may be, there are ſtill others of much more dangerous conſequence.

What is the principal end of ſociety? It is union and concord amongſt its members. Theſe ineſtimable advantages can never be found in ſtates where profeſſions are hereditary, and attached to certain families. This ſort of diviſion produces invincible averſion, very different from ſuch ſentiments as ſpring from difference of rank only, a difference which excludes not reciprocal attachments between inferiors and ſuperiors. A body of men united and attached from their infancy to one certain profeſſion, know and eſteem only that profeſſion, and regard all others with a ſovereign contempt. From whence ariſe innate hatred, indelible jealouſy, and mutual diſdain among all the members of the ſtate. Mutual good-will, mutual deference, and one common intereſt, are the prop and baſis of every kind of government; all motives to which are deſtroyed by this wretched policy. It renders the greater part of the citizens uſeleſs to each other. It acts in direct contradiction to the intention of ſociety; the end of which is to unite the minds of the perſons compoſing the ſtate, and to bring them to regard each other as brethren, and as members of one and the ſame body. It ſuppreſſes the moſt ſalutary effects which men ought to draw from the neceſſity and habitude of living together. In ſuch ſtates every one regards as an alien, as a kind of enemy, a man of another tribe than his own. Let us take one example more, and judge of the paſt by the preſent.

In all times, the people of the Greater India have been divided into different *caſtes* or tribes. In all times profeſſions have there been hereditary in families, and the tribes have never been permitted to contract alliances with each other [q]. What is the effect of this fatal policy? Every tribe has its own language, its own religion, uſages, cuſtoms, and particular laws [r]. There are as many temples or pagods

[q] Diod. l. 2. p. 153. 154.; Strabo, l. 15. p. 1029. 1033.; Arrian. de Ind. p. 530. 533.

[r] Voyage de la Boulaye le Gouz. p. 159. 160. 122.; Voyage of Ovington, t. 1. p. 292.; Let. édif. t. 12. p. 67.

as

as there are tribes; no communication, no relation, all is ſeparate and peculiar. Each pagod is ſerved by the miniſters of its own tribe [r]. Every trade is confined to its own caſte, and can be exerciſed only by thoſe whoſe parents profeſſed it [s]. A man of an inferior caſte, whatever merit he may have, can never riſe to one ſuperior [t]. The ſciences are inacceſſible to every tribe but that of the Bramins and the Rajas [x]. Two men of different caſtes may not eat together, approach each other, nor converſe familiarly [y]. They often come to blows on the ſubject of precedency [z]. One cannot conceive to what exceſſes the human mind may be carried by ſuch prejudices and ſuch infatuation [a]. There is ſuch a caſte held ſo low and contemptible, that thoſe belonging to it dare not look a man in the face who is of a caſte ſuperior If they did take that liberty, he would have a right to kill them on the ſpot [b]. I dare not affirm, that the diviſion of the people into different claſſes, and the hereditary profeſſions, produced as bad effects in Egypt; but if the conſequence was the ſame, as is very probable [c], what ſhall we think of the wiſdom and foreſight of their firſt legiſlators?

There was a fault ſtill more eſſential in the conſtitution of the Egyptian government. Marriages were permitted between brothers and ſiſters [d]. That cuſtom is entirely contrary to the rules and principles of good policy. It could be neceſſary only when the earth was void of inhabitants and needed peopling; but ought to have been aboliſhed as ſoon as mankind began to multiply, and political ſocieties to be formed. By the light of reaſon alone, moſt legiſlators perceived the inconveniencies which muſt reſult from marriages between brothers and ſiſters. They were ſenſible, that, without intermarriages, each family would form a ſeparate and independent body in the ſtate, by which means

[r] La Boulaye, p. 159.; Voyage de Pirard, p. 277. [s] Lett. édif. t. 5. p. 8.
[t] Lett. édif. t. 24. p. 204.
[x] Ibid. t. 26. p. 221.; Memoires de Trev. Mars, 1701, p. 17.
[y] Lett. édif. t. 12. p. 67.; Voyage de Pirard, p. 273. *&c.*; Anc. relat. des Indes et de la Chine, p. 123. 124. [z] Lett. édif. t. 12. p. 68.
[a] Ibid. p. 96. *&c.* [b] Lett. édif. t. 12. p. 68.
[c] See Herod. l. 2. p. 47? 167. [d] See part 1. book 1. art. 4.

al

all ties of common intereſt muſt neceſſarily be looſened. The Chineſe proceed upon much wiſer maxims than did the Egyptians. The laws of China not only forbid the marriage of brothers and ſiſters; they do not even permit alliances in the ſame family, be the affinity ever ſo diſtant [e]. This is a very prudent law, and founded on the trueſt policy. It was eſtabliſhed not only to unite all the ſubjects in one common intereſt, but alſo to prevent any particular family from combining and forming confederacies, a ſort of union which is always prejudicial to a ſtate.

What the partiſans of the Egptians moſt eſteem in the character and genius of that people, is their attachment to their cuſtoms and their reſpect for their laws. They have beſtowed the greateſt praiſes on their conſtancy in obſerving them, and their ſtrictneſs in permitting no deviation from the primitive uſages of the monarchy. The introduction of a novelty was, ſay they, a prodigy in Egypt. All was done by precedent [f]. The Egyptians diſdained to borrow any thing from other nations [g].

Certain however it is, that the Egyptians can deſerve no peculiar eulogium on this account. It is a principle common to all the eaſtern nations. We know, that the Orientals are ſtrictly attached to their proper cuſtoms, and never change them. Their ways of thinking and acting are the ſame they ever were. Beſides, it is agreed, that the temperature of the air and the poſition of climates have a conſiderable influence on the characteriſtic humour of a people. The always uniform temperature of Egypt is the cauſe of the ſolidity and conſtancy of the inhabitants. It remains to inquire whether this virtue puſhed to exceſs, may not become a vice.

We cannot reflect too much, nor take too many precautions before we tamper with the ancient conſtitutions of a ſtate, and attempt any alterations; this ſcruple, however, ought to have its bounds. It is certain, from experience, that a law may have been very good at one time, yet ceaſe

[e] Martin. l. 1. p. 31. [f] Plato de leg. l. 2. p. 789. l. 7. p. 886.; Diod. l. 1. p. 74.; Porphyr. de abſtin. l. 4. p. 370. 371. [g] Herod. l. 2. n. 98.

to be ſo at another, and even become a grievance. It is equally true, that there are laws whoſe bad tendencies time only can diſcover. Circumſtances change, and it then becomes neceſſary to change the political ſyſtem alſo, to aboliſh the ancient laws, and to ſubſtitute new ones in their places. It is impoſſible that the firſt legiſlator ſhould have foreſeen every thing. Why ſhould we not avail ourſelves of uſeful diſcoveries made in other climates? Is an inſtitution of leſs value becauſe it is not our work? Or ought that motive to prevent our appropriating it, when the advantages which may reſult from it are evident? In a word, a rigid attention to the obſervation of ancient laws, and reſpect for antique cuſtoms, ought never to extend ſo far as to reſtrain the efforts of genius and imagination. Time only can give perfection to arts and ſciences. New lights are acquired every day, and every day our views are rectified and extended. Experience lays open the errors and abſurdities of ancient practices. It is then the part of good policy to reform the old and erroneous uſages, and to invent and eſtabliſh more ſuitable methods in their room. This nevertheleſs is what could not be done in Egypt. Conſtantly tied to the obſervance of primitive cuſtoms, they were not permitted to deviate from them on any occaſion: the laws expreſsly forbade it *.

The effect of this pernicious manner of thinking has been ſuch, that, generally ſpeaking, the oriental nations have made no proficiency in any kind whatſoever. They have drawn no improvement or advantage from their frequent commerce with the Europeans, but always limited and bound to their ancient uſages, they are the ſame juſt now that they were 3000 years ago. I think the reaſon of this may be found in what I have formerly ſaid on the eſtabliſhment of hereditary profeſſions in families. If they had permitted the introduction of new arts, they muſt have created new tribes, and ſuffered the depoſitaries of their ancient knowledge to periſh with want.

* Plato, Diod. Porphyr. *locis ſupra cit.*

Notwithſtanding

Notwithſtanding the defects which we have here taken notice of in the Egyptian politics, we muſt, however, do juſtice to theſe people, and acknowledge that theſe imperfections are made amends for by many excellent maxims, and admirable principles, ſuch, in a word, as are ſufficient to make us conceive a very advantageous idea of their legiſlators.

The Egyptians were certainly acquainted with many of the trueſt maxims of government. This grave and ſerious nation eaſily comprehended, that the true end of politics is to make the people happy, and that they can only be ſo in proportion as they are inſpired with ſentiments of virtue and gratitude. With this view, the attention of the legiſlature was turned to conciliate mutual reſpect among the citizens, and to impreſs them with a juſt and ready knowledge of their relative duties. Hence thoſe ſevere laws againſt murder, adultery, and rapes, and all thoſe regulations invented and eſtabliſhed for the ſecurity of the citizens againſt each other [i]. Hence that infinite reſpect they paid to old men. The youths were obliged to riſe at their approach and yield them every where the firſt place [k]. In fine, the legiſlature took care to carry the rules of civility to the greateſt extent [l]. Theſe were ſo many civil and political ties invented to reſtrain licentiouſneſs, and maintain peace and good order among the citizens; they were ſo many expedients adapted to inculcate ſweetneſs of temper, and capable of preſerving union, by baniſhing all the vices which proceed from harſh and unpoliſhed characters.

From the ſame principle are derived the laws relating to the burial of the dead, the cuſtom of embalming and depoſiting them in magnificent ſepulchres, and that of regarding the dead body of a father as the ſureſt pledge for the debt of his ſon [m]. All theſe inſtitutions tended to nouriſh filial love and veneration for parents. They who

[i] See part 1. book 1. art. 2.
[k] Herod. l. 2. n. 80. [l] Ibid. [m] Supra, p. 14.

had ſo great a reſpect for their fathers when dead, muſt certainly have treated them with deference when alive. That glory which is allowed the Egyptians of being the moſt grateful of all men [n], demonſtrates the juſtneſs of the meaſures which the legiſlators had taken to ingrave that virtue in the hearts of their people.

But there is one cuſtom of the Egyptians which deſerves all the praiſes we can poſſibly beſtow; it is that of bringing the memory of the dead into judgment, and making the lives of the deceaſed paſs a rigorous examination before the honours of ſepulture were decreed them. The trial was held in public. It was the people who decided and pronounced ſentence [o]; and certainly there could not on ſuch occaſions be a more competent judge. This was an excellent method for keeping the whole nation in their duty, the kings themſelves not being exempt from it. Hiſtory preſents us with no cuſtom more prudent or more politic, tending to inſpire the citizens with the nobleſt ſentiments of honour and virtue. Maxims like this have always been the foundation of ſuch empires as are known to have ſubſiſted the longeſt time, and with the greateſt glory.

CHAP. V.

Of Greece.

I Have already indicated in the preceding volume a part of the revolutions which Greece underwent in the beginning of the ages which are now under conſideration. There we ſaw how the return of the Heraclidæ into Peloponneſus had produced an entire change in the different principalities of that part of Europe [p]. It muſt be remembered alſo, that about the ſame time Thebes and Athens, whoſe government had hitherto been monarchical, changed it into the republican [q]. There were ſtill other commo-

[n] Diod. l. 1. p. 101.
[o] Ibid. p. 84. 103.
[p] See part 2. book 1. c. 3. art. 6.
[q] Ibid.

tions

tions in Greece. Some kingdoms which had been formed originally came to an end, and ſome new ones were raiſed. Many cities, after the example of Thebes and Athens, erected themſelves alſo into republics [r]. The hiſtory of all theſe different ſtates is not equally intereſting.

We may affirm, that the knowledge of that of Athens and of Lacedæmon only is of any importance. Theſe two cities, by means of the aſcendant and ſuperiority they acquired in Greece, directed the motions, and even modelled the genius of the whole nation. Athens and Lacedæmon were the leaders in all the principal events in which the Greeks were concerned: inſomuch that if we carefully ſtudy the hiſtory of theſe two cities, we ſhall be perfectly well acquainted with the character, genius, and politics of the Greeks. I ſhall therefore content myſelf with laying open the Athenian and Spartan principles of government, with examining the form of it, and pointing out the differences between the governing maxims of theſe two republics.

ARTICLE I.

ATHENS.

ALthough the Athenians, like all the other ſtates of Greece, were originally governed by kings, never any people were more ſtrongly inclined to democracy. The power of their kings reſtrained nearly to the mere command of the armies, was nothing in time of peace [s]. Plutarch obſerves, that in Homer's catalogue of the Grecian forces at the ſiege of Troy, the poet diſtinguiſhes the Athenians by the name *People* [t]. Yet at that time they were governed by a king *. Homer, by this diſtinction, undoubtedly intended to make known the bent of the Athenians towards democracy, and give us to underſtand that

[r] Paſan. l. 1. c. 43. p. 103.
[s] See part 2. book 1. art. 7. [t] Iliad. l. 2. v. 54.; Plut. in Theſ. p. 11. D.
* Meneſtheus was then their king, who had taken the crown from Theſeus.

the

the principal authority reſided in the people. Upon the death of Codrus, a difference which aroſe among his children, furniſhed the Athenians, weary of monarchical government, with a pretext to aboliſh it.

Codrus, the prince who ſo generouſly ſacrificed himſelf for his people, left two children, Medon and Nileus [u]. Medon was the eldeſt, and in that right ought to have ſucceeded to the crown; but Nileus oppoſed it, under pretence that Medon being a cripple, ſuch a deformity degraded the majeſty of the throne [x]. The Athenians referred the deciſion of this difference to the oracle of Delphos. The Pythian prieſteſs pronounced in favour of Medon, and adjudged him the crown [y].

This deciſion which confirmed the right of Medon, ought to have removed all obſtacles; but either the people had no regard for it, or, which is moſt likely, the ſenſe of the oracle had an ambiguity, which the Athenians interpreted ſo as to favour their inclination to aboliſh monarchy [z]. Be that as it will, they took occaſion from thence to change the form of their government, and ſuppreſs the royal authority. Jupiter was declared ſole monarch of Athens [a]. For the government of the ſtate they choſe magiſtrates to whom they gave the name of *Archontes*. Medon had no advantage but that of being honoured with that dignity. The firſt Archontes were perpetual. He who was inveſted with that office, held it for life [b].

This new form of government ſubſiſted 331 years. But the Athenian people, who were fond to exceſs of liberty without bounds, looked upon the perpetual archontate as too lively an image of royalty. Reſolved to aboliſh even the ſhadow of it, they reduced the exerciſe of the archontate to ten years [c].

This reduction, however, did not produce tranquillity. Jealouſy and the natural inquietude of the Athenians repreſented that ſpace of ten years as too long and dangerous.

[u] Pauſan. l. 7. c. 2. *init.* [x] Ibid. [y] Ibid.
[z] See Marſham. p. 342. [a] Ibid. [b] Ibid. [c] Ibid.

With

With a view of oftener reſuming the authority which they reluctantly intruſted to their magiſtrates, this diſtruſtful people thought fit to abridge the time of their functions, and at laſt they reduced the term of the archontate to one year only [d].

Theſe revolutions expoſed Athens to the greateſt calamities. A power ſo limited as that of the archontes was inſufficient to reſtrain reſtleſs ſpirits, become jealous to exceſs of liberty and independonce. Factions and broils aroſe every day, and all concord was at an end [e]. It would be difficult to determine exactly what was the form of government at Athens till the time of Solon. Ancient authors have not explained themſelves preciſely on this ſubject. We find nothing in their writings which can give us a clear idea of it. It is very probable, that, for the internal government and preſervation of the ſtate, they obſerved moſt of the laws by which Athens was governed in the time of their Kings [f].

Athens was in ſuch a ſituation as muſt have drawn on its total ruin. Misfortunes inſtruct. The Athenians perceived that the ſtate could not ſubſiſt amidſt the troubles and diſſenſions which diſtracted it. They then conſidered how to check that ſpirit of independence which poſſeſſed the citizens. For this important work they caſt their eyes on Draco, an illuſtrious perſonage, of known wiſdom and probity, and well verſed in divine and human laws [g]. They intruſted him with authority neceſſary to reform the ſtate, and to publiſh ſuch laws as might remedy grievances which it was high time to put an end to. As the name of Draco is found in the liſt of the Archontes, we may believe, that it was during his magiſtracy that he undertook to reform the republic.

We do not find that before Draco the Athenians had any body of laws reduced into writing [h]. They might indeed

[d] Ibid. [e] Plut. in Solon. p. 84. 85. [f] See Pauſan. l. 4. c. 5. *ſub fin.*
[g] A. Gellius, l. 1. c. 18. [h] Joſeph. adverſ. Appion. l. 2. c. 6.

have

have had written laws [i], but they had not compiled them, nor formed a code of them. The adminiſtration of the laws was ſo uncertain, that almoſt all the judgments were arbitrary. They had not even ſpecified what actions were criminal, and what puniſhment ſhould be inflicted on thoſe who committed them [k]. Draco may be regarded as the firſt legiſlator of Athens [l].

He was of a hard and auſtere character. His ſeverity was extreme, and making no diſtinction between offences, he puniſhed with death the ſlightful fault, equally with the moſt enormous crime [m]. Draco renewed alſo the law which ordered proſecutions againſt things inanimate, when they had occaſioned the death of any one [n]. Being aſked why he decreed capital puniſhment for all ſorts of faults; becauſe, anſwered he, the ſmalleſt appears to me worthy of death, and I have been able to find no other puniſhment for the greateſt [o]. Herodicus ſaid of the laws of Draco, that they ſeemed leſs the work of a man than of a dragon, alluding to the name of the legiſlator [p]. Demades, a famous orator, characteriſed them very well, when he ſaid they were not writen with ink, but with blood [q]. Ariſtotle does not appear to have made a great account of them, ſince he ſays that they were remarkable for nothing but their cruelty [r]. There remains nothing of the laws of Draco, except ſome ſcattered fragments in different authors [s]. We do not find that this legiſlator changed any thing in the form of government [t]. He only conſtituted a new court called the *Ephetes* [u]. This tribunal compoſed of fifty-one judges, choſen amongſt thoſe of the greateſt diſtinction in the ſtate, became the chief tribunal of Athens. They

[i] Demoſthenes ſpeaks of a law of Theſeus wrote upon a pillar of ſtone. In Neæram, p. 673. C.

[k] See part 2. book 1. art. 8. [l] A. Gell. l. 1. c. 18.

[m] Plut. in Sol. p. 87. E. [n] Ibid. [o] Ibid.

[p] Ariſt. rhet. l. 2. c. 23. p. 579. B. [q] Plut. *loco ſupra cit.*

[r] Polit. l. 2. c. 12. p. 337. C.

[s] Thyſius has made a collection of them, apud Gronov. theſ. Gr. antiq. t. 5.

[t] Ariſt. *loco cit.* [u] Pollux, l. 8. c. 10. ſegm. 124. 125.

appealed

appealed to them from the deciſions of all the other juriſdictions, as the ſole judges in the laſt reſort. This great luſtre of the Ephetes was not of long duration. The Areopagus humbled by Draco, reſumed its ancient ſplendor under Solon.

The laws of Draco were too violent to ſubſiſt long, if they had been ſtrictly executed; the law would have deſtroyed more citizens than the ſcourges of heaven, or the ſword of the enemy. They were obliged therefore to ſoften the rigour of them; and the extreme ſeverity of theſe laws led into the oppoſite exceſs, licentiouſneſs and impunity. Factions and diviſions were renewed with greater force than ever. They relapſed into their firſt troubles. The republic ſplit into as many parties as there were different ſorts of inhabitants in Attica [x]. They were ready to come to the worſt extremities. In this danger they had recourſe to Solon, who, by his rare qualities, and particularly by his great moderation, had acquired the affection and veneration of the whole city [y]. They preſſed him to labour the ceſſation of diſcord, by taking upon himſelf the management of public affairs.

Solon heſitated long before he would charge himſelf with a commiſſion of ſo much difficulty [z]; at length he was elected Archon, without the form of drawing lots as in other elections [a], and with unanimous conſent they named him ſovereign arbiter and legiſlator of Athens [b].

Solon, inveſted with abſolute authority, and maſter of the hearts of his fellow-citizens, applied himſelf ſtrenuouſly to reform the government of Athens. He conducted himſelf, with all the firmneſs and prudence requiſite in a ſtateſman. Although he knew perfectly the whole extent of the evil, yet he did not think it expedient to correct certain abuſes which appeared too ſtrong to be remedied. He undertook no changes, but ſuch as he hoped to make the Athenians reliſh by means of reaſon, or force them to accept by the weight of authority, wiſely tempering, as he ſaid

[x] Plut. in Sol. p. 85. [y] Plut. ibid. [z] Plut. ibid.
[a] Ælian. var. hiſt. l. 8. c. 10. [b] Herod. l. 1. n. 29; Plut. p. 87. E.

himſelf, force with lenity. Thus being aſked, whether the laws which he had given the Athenians were the beſt which could have been preſcribed them? yes, ſays he, the beſt that they were capable of receiving [c].

Solon began with repealing all the laws of Draco, except thoſe which regarded murderers [d]. He then proceeded to the police of the ſtate, that is to ſay, to the diſtribution of offices, dignities, and magiſtracies. He left them all in the hands of the rich, whom he diſtributed into three different claſſes relative to their different abilities. Thoſe whoſe revenue amounted annually to five hundred meaſures, as well of grain as of dried fruits and drinks, compoſed the firſt claſs. In the ſecond were ranked ſuch citizens as had three hundred, and could maintain a horſe in time of war. In the third were placed thoſe who had two hundred [e]. The fourth and laſt claſs comprehended all hirelings, and ſuch as lived by their labour [f].

The citizens of this claſs were never admitted into offices. Solon gave them only the right of voting in the public aſſemblies. This privilege, which at the beginning appeared of little conſequence, became in the end very conſiderable, and rendered the people abſolute maſters of affairs, ſeeing the greater part of law-ſuits and differences were brought back to the people by right of appeal from all the ſentences of the magiſtrates. Beſides, as the laws of Solon had the defect of being written with much obſcurity, they perpetually wanted explanation; and the public aſſemblies had the ſole right of determining what ſenſe ought to be given them [g]. It was alſo in theſe aſſemblies, that the greateſt affairs of the ſtate were decided, ſuch as peace and war, treaties, the regulation of the finances, &c.

Thus the conſtitution of the government of Athens was purely democratical; that is, all the authority was in the hands of the people [h]. It appears, that Solon was ſenſible

[c] Plut. in Sol. p. 86. C. [d] Ælian. var. hiſt. l. 8. c. 10., Plut. p. 87. E.
[e] Ariſt. polit. l. 2. c. 12. [f] Plut. p. 87. E. [g] Ariſt. Plut. *locis cit.*
[h] Plato in Menex. p. 519.; Demoſth. in Neaeram, p. 875. C.

of

of the inconveniencies of the exceſſive power which he had truſted to the multitude. He conſidered how to give it a check; and, in this view, he choſe out of every tribe, a hundred perſons of merit, of whom he compoſed a new council called *the ſenate*. As in the time of this legiſlator there were only four tribes, the number of the ſenators was 400. The people could only make decrees on what had been debated and propoſed in the ſenate [i]. Before the ſenate could aſſemble, the ſubject on which they were to deliberate was to be publicly notified [k]. After the affair had been examined, they read to the people what had been concluded in the ſenate. Thoſe who had a mind to ſpeak, then mounted the tribunal of harangues. When afterwards they came to vote, the public crier began with calling with a loud voice the citizens who had paſſed the age of fifty years [l], and proceeded to thoſe of thirty; for that age muſt have been attained before any one could have right of ſuffrage in the public aſſemblies. In the firſt place, they decided whether the affair ſhould be put under deliberation. In effect, the people had the power either purely and ſimply to reject the decree of the ſenate, or to order the execution of it after examination [m]. It is on this ſubject, that Anacharſis ſaid one day to Solon: "I wonder, that, among you, ſages "ſhould only have the right of deliberating, while that of "deciding is reſerved for fools [n]."

To re-eſtabliſh the authority of the Areopagus depreſſed by Draco, had been one of the firſt cares of Solon. To this auguſt court he committed the general inſpection over the whole ſtate, and the care of ſeeing the laws obſerved, of which he made them the guardians [o]. It is unneceſſary to enter into any detail of the civil regulations of this legiſlator, they are ſufficiently known. We know the homage paid by the Romans to the laws of Solon, ſome of which ſubſiſt to this day, ſeeing they were the foundation of the Roman law adopted by almoſt all Europe. It appears, that Solon

[i] Plut. p. 88. D.
[k] Potter archeol. l. 1. c. 26. p. 122.
[l] Plut. t. 1. p. 784. C.
[m] See Sigon de rep. Athen. l. 2. c. 34.
[n] Plut. in Sol. p 81. B.
[o] Plut. p. 88. F.; Athen l. 4. c. 19. p. 168.

had borrowed many of them from the Egyptians [p]. They ingraved them upon rolls of wood ſet into frames, in ſuch a manner as to be eaſily turned round [q]. Theſe monuments were firſt depoſited in the citadel, and afterwards in the Prytaneum, to the end that all the world might have acceſs to conſult them [r]. Some of theſe frames and rolls ſubſiſted ſtill in the time of Plutarch [s].

To explain the conſtitution of the government of Athens, is to make known its defects. Every ſtate where the people judges and decides, is eſſentially vitious. How in effect is it poſſible to debate affairs in aſſemblies ſo numerous? How is it poſſible even to be heard? We may judge of the multitude of auditors compoſing the aſſemblies at Athens, by the number of ſuffrages which the law exacted when a citizen was to be baniſhed by the oſtraciſm, or a ſtranger to be adopted. In either caſe, ſix thouſand votes at leaſt were neceſſary [t]. What troubles moreover muſt not have been occaſioned by party-diviſions, and the diverſity of opinions, intereſts, and private views?

Solon, to make uſe of an expreſſion of Plutarch, had believed that the government of Athens, fixed and ſecured by the Areopagus and the ſenate of four hundred, as by two firm and immoveable anchors, would ceaſe to be agitated and tormented [u]. The ſucceſs however did not anſwer his expectation. Never ſtate was more agitated, or

[p] *Solon ſententiis adjutus Ægypti ſacerdotum, latis juſto moderamine legibus, Romano quoque juri maximum addidit fir mamentum.* Amm. Marcell. l. 22. c. 16. p. 346.

It is true, that, according to Herodotus, l. 1. n. 29. and Plut. p. 92. Solon was not in Egypt till after he had publiſhed his laws; but this legiſlator either underſtood the laws of Egypt before his voyage, or elſe he added to thoſe laws, and corrected them by the knowledge he had acquired in Egypt; for it is certain, even by the teſtimony of Herodotus, Diodorus, and Ammianus Marcellinus, that Solon had borrowed many laws from the Egyptians. See Herod. l. 2. n. 177.; Diod. l. 1. p. 88. 90.; Amm. Marcell. l. 22. c. 16. p. 846.

[q] Plut. t. 1. p. 92. B. t. 2. p. 79.; A. Gellius, l. 2. c. 12.; Suid in Ἄξονες, t. 1. p. 240. in Κυρβεις, t. 2. p. 400.

[r] Poll. l. 8. c. 10. ſegm. 128. [s] Plut. ſupra.

[t] Demoſth. in Neæram, p. 875. E; Pollux, l. 8. c. 5. ſegm. 20.; Plut. in Ariſtide, p. 322. F.

[u] In Sol. p. 83. E.

for

tom by more cruel diſſenſions. The cauſe can only be attributed to the too great authority poſſeſſed by the people. "The raſhneſs and licentiouſneſs of the popular aſſemblies "have ruined the republics of Greece," ſays Cicero[x]. I add, and particularly that of Athens.

Solon had indeed foreſeen the abuſe which the people would make of the power which he had intruſted to them, and had therefore deviſed a check to reſtrain them; but this check was not ſufficient. The *Areopagus* had no part in the government; and the ſenate depending itſelf upon the people, could not repair a conſtitution of ſtate eſſentially bad and defective. There was even a radical vice in the conſtitution of this ſenate deſigned for a reſtraint upon the people. It was too numerous. Compoſed in its original of 400 perſons, it afterwards conſiſted of 600. Experience has always manifeſted, that the talents of the greateſt men are cramped when they are aſſembled; and that where there is the greateſt number of ſages, there is alſo the leaſt wiſdom[y].

We commonly view the Athenians on their favourable and advantageous ſide. We are ſtruck with the ſhining images of the hiſtory of Athens, and impoſed upon by its luſtre. We are dazzled by the battles of Marathon and Salamis, by the pomp of the ſpectacles, by the taſte and magnificence of the public monuments, by that croud of great men excellent in every way, which will render the name of Athens for ever precious and memorable. Nevertheleſs, if we would examine the interior ſtate of this republic, very different ſcenes would preſent themſelves[z]. We ſhould ſee a ſtate in inceſſant combuſtion, aſſemblies always tumultuous, a people perpetually agitated by brigues and factions, and abandoned to the impetuoſity of the vileſt haranguer; the moſt illuſtrious citizens perſecuted, baniſhed, and continually expoſed to violence and injuſtice[a]. Virtue was preſcribed at Athens, and ſervices done their

[x] Pro Flacco, n. 7. t. 5. p. 244.
[y] Perſian letters, let. 126.
[z] See Plato in Alcib. 10. p. 448. B.
[a] Id. in 2. p. 451. 456.

country

country forgot, nay often puniſhed by the oſtraciſm. What a government was that where the ſight of ſuch citizens as had beſt ſerved the ſtate was odious and inſupportable! Valerius Maximus had reaſon to exclaim, "Happy Athens, "after ſuch unjuſt treatment, ſtill to have found citizens "who loved their country [b]." The hiſtory of all the other people of Greece cannot furniſh near ſo many examples of injuſtice and ingratitude towards the benefactors of the ſtate, as does the ſingle city of Athens.

It cannot, however, be denied that good nature, generoſity, and even greatneſs of ſoul, formed the general and predominant character of the Athenians. We might cite a thouſand examples. I ſhall relate no other than the law which ordained the conducting into the right road whoſoever had happened to loſe it [c]. But the populace will always be populace; every where fickle, capricious, unjuſt, cruel, and hurried away by the firſt impreſſions. Every individual Athenian was naturally good-natured, affable, obliging; but in the public aſſemblies it was no longer the ſame man [d]. Ariſtophanes repreſents the people of Athens under the emblem of an old man, very ſenſible at home, but who falls into dotage in the public aſſemblies [e]. The unequal conduct of the Athenians diſguſted their allies, and at length entirely alienated them. It was ſtill more inſupportable to the cities of their dependence. They treated them with the utmoſt rigour [f]. Thoſe cities were forced to endure the caprices of a people flattered and perpetually ſeduced by their orators; that is to ſay, according to Plato, ſomething more dangerous and more terrible than the caprices of a prince ſpoiled by the flattery and homage of a few inconſiderable courtiers.

[b] L. 5. c. 3. [c] Cicero de offic. l. 3. n. 13.

[d] See Plato de leg. l. 3.; Xenophon de rep. Athen.; Polyb. l. 6. c. 8.; Ælian. var. hiſt. l. 2. c. 19. l. 3. c. 18. l. 5. c. 13.

[e] In Equit. act. 2. ſcen. 2. [f] See Caſaubon in Athen. p. 114. 175.

ARTICLE

ARTICLE II.

LACEDÆMON.

WE have ſeen in the ſecond part of this work, that 80 years after the taking of Troy, the deſcendents of Hercules retook poſſeſſion of Peloponneſus. They then marched under the conduct of three principal chiefs, Ariſtodemus, Temenes, and Cteſiphon. Theſe conquerors parted amongſt them the countries of which they had made themſelves maſters. Temenes had the Argolis. Meſſenia fell to Cteſiphon. Ariſtodemus dying in the courſe of this expedition, his two ſons Euriſthenes and Procles took his place, and had for their ſhare Laconia [a].

Theſe two princes did not think fit to divide the domain adjudged to them. Neither did they reign alternately, as Eteocles and Polinices had formerly agreed to do at Thebes; but whether in virtue of their father's orders, or from ſome other motives which we are ignorant of, they governed conjunctly and with equal authority, each of them bearing the title of *King of Lacedæmon*, and being acknowledged in that quality. What is the moſt aſtoniſhing, is, that theſe two brothers had the ſtrongeſt antipathy for each other. They never agreed; and all their life was paſſed in continual diſcords: even their deſcendents inherited that fatal miſunderſtanding [b]. For this form of government did not end with them. The ſceptre remained conjunctly in theſe two branches which ſubſiſted about 900 years, during which time they gave kings to Sparta from father to ſon without interruption. Thirty are reckoned in the line of Euriſthenes, and twenty-ſeven in that of Procles. Theſe two families became extinct nearly about the ſame time: remarkable ſingularities theſe, and

[a] Supra, part 2. l. 1. c. 3. art. 6.
[b] Herod. l. 6. n. 52.; Pauſan. l. 3. c. 1. p. 205. 206.

of

of which I believe no example is to be found in any other nation.

The revolution which had raviſhed the ſceptre from the deſcendents of Pelops to reſtore it to the Heraclidæ, had cauſed all the horrors of war to be felt in Peloponneſus. The inhabitants driven from their heritages had been conſtrained to fly, and to ſeek an aſylum in the neighbouring provinces [i]. The country was left a deſert. The firſt care of Euriſthenes and Procles was to think of means to repeople Laconia. The more readily to attain this end, they determined to receive all ſtrangers who ſhould come, let their reaſons for retiring thither be what they would; and in order to fix them, they granted them the rights and privileges of natives and citizens [k].

The two kings then divided all Laconia into ſix parts. They choſe Sparta for their capital, and eſtabliſhed there their reſidence. From this ſeat of government, they ſent rulers into the cities of their dependence to ſignify their orders to the people [l]. We are ignorant as to the reſt, what were then the laws and maxims of government. From this epocha till the reform of Lycurgus, the hiſtory of Sparta is very obſcure. We ſhall paſs over theſe times of darkneſs, and proceed to the age of this famous legiſlator.

Although the regal power was eſtabliſhed, and conſtantly ſubſiſted in the two branches of the reigning family, the ſtate felt at laſt the effects of the diſcords which this divided authority could not fail to occaſion. The two kings formed each a party to which every one attached himſelf according to his intereſts or particular inclination. Theſe inteſtine diviſions forced the ſovereigns to ſeek, in emulation of each other, means to gain the affection of their ſubjects. They had recourſe to ſuch relaxations of authority as inſenſibly became very prejudicial to the maintenance and tranquillity of the ſtate.

[i] Supra, part 2. l. 1. c. 3. art. 6.
[k] Strabo, l. 8. p. 560. 561. 562.
[l] Ariſt. polit. l. 2. c. 9. p. 329. E.; Strabo, p. 560.

Eurypont

Eurypont on Eurithion, grandſon of Procles, was the firſt who, to pleaſe the people, remitted ſomething of the abſolute authority which the kings of Sparta had always enjoyed. A condeſcenſion which produced horrible confuſion and unbridled licentiouſneſs: a ſource of an infinity of miſchiefs which long afflicted the ſtate. The people, inſtead of growing more tractable, became only the more inſolent. Liberty degenerated into independence. The Kings had no longer any authority. They even dared to attempt their ſacred perſons. Eunomes, the father of Lycurgus, loſt his life in a ſedition [m]. In the midſt of theſe troubles and anarchy appeared Lycurgus, whoſe prudence and firmneſs wrought an entire change in the government of Lacedæmon.

This famous legiſlator might eaſily have mounted the throne upon the death of his elder brother, who had left no male iſſue: he even reigned ſome months. But having learned that the queen his ſiſter-in-law was pregnant, he declared that the crown belonged to the child which ſhould be born, if it were a ſon. He kept his word; and the queen being delivered of a prince, Lycurgus declared him king, and from that inſtant diveſted himſelf of the ſovereign power [n].

A conduct ſo generous did not lay the ſuſpicions which ſome enemies of Lycurgus had deſigned to raiſe of the uprightneſs of his intentions. To calm theſe and diſſipate them entirely, this great man condemned himſelf to a voluntary exile. He undertook many voyages, with a view of conſulting the moſt able and experienced ſages in the art of governing. He went firſt to Crete; then paſſed into Aſia; and laſtly travelled into Egypt, then the abode of ſcience and politics [o].

Lycurgus had governed the ſtate but three months, but that time was ſufficient to make known his abilities. His virtues had attracted the eſteem and veneration of all his

[m] Plut. in Lycurg. p. 39.
[n] Plut. p. 42, 41.
[o] Plut. p. 41. 42.

fellow-citizens [p]. His abſence made them ſtill more ſenſible of their value. Diſorders had ſo increaſed in Sparta, that the whole ſtate ſent deputies ſeveral times to preſs his return [q]. This diſpoſition of the minds of the citizens determined Lycurgus to reviſit his country. He immediately reſolved to change the form of government, perſuaded that the eſtabliſhment of ſome particular laws could bring no relief to the evils he wanted to cure [r].

Before he executed his deſign, he went to Delphos to conſult Apollo upon the deſign he meditated. The god approved it. He received the moſt favourable anſwer. The prieſteſs ſaluted him the friend of the gods, exclaiming that ſhe knew not whether ſhe ought not to regard him as a divinity rather than a mere mortal. Then ſhe aſſured Lycurgus, that Apollo had granted his petition, and that he ſhould form a ſtate the moſt excellent that had ever exiſted [s].

We eaſily conceive what credit and authority Lycurgus acquired by ſuch a ſanction, and how much it aſſiſted him in removing difficulties. On his return to Lacedæmon, he began by gaining the moſt eminent of the city, by communicating to them his deſigns. Being aſſured of their conſent, he engaged them to meet in arms in the public ſquare, to aſtoniſh and intimidate thoſe who ſhould attempt to oppoſe his projects [t]. He met with no obſtacles, and did whatever he pleaſed.

I ſhall paſs over in ſilence the detail of the inſtitutions and ordinances of Lycurgus. I ſhall only remark, that this legiſlator did not think fit to commit his laws to writing: he even very expreſsly forbade it. He wanted to imprint them into the minds and hearts of his fellow-citizens [u], and he ſucceeded. It is obſervable alſo, that this legiſlator would make no civil law [x].

It would be difficult, as to the reſt, to give a juſt and preciſe idea of the political government of Lacedæmon.

[p] Plut. p. 41. A.
[q] Plut. p. 42.
[r] Ibid.
[s] Plut. in Lycurg. p. 42.
[t] Ibid.
[u] Ibid. p. 43.
[x] Id. ibid.

Plato

Plato himſelf agrees, that it is not poſſible to define it [x]. In effect, the government of Sparta was, properly ſpeaking, neither monarchical, nor ariſtocratical, nor democratical; it was mixed, and participated of all theſe different kinds of political conſtitutions.

There were two kings at Sparta, but their power was weak and greatly circumſcribed. It does not appear, that their will had any conſiderable influence in the ſtate, or that they had any great credit in the public deliberations [y]. They were, properly ſpeaking, only the firſt citizens of the ſtate [z]; they acknowledging a ſuperior authority in the Ephori and the people, to whom they were accountable for their conduct [a]. However, they enjoyed great privileges, ſufficient to diſtinguiſh them honourably. Their perſons alſo were held in the greateſt reſpect and conſideration [b].

The ſenate compoſed of twenty-eight elective members, was originally poſſeſſed of a very extenſive authority. This body had been inſtituted by Lycurgus to maintain an equilibrium between the kings and the people; the ſenate ſiding with the kings when the people wanted to engroſs too much power, and on the contrary ſupporting the intereſts of the people, when the kings appeared too enterpriſing [c]. The kings aſſiſted in the ſenate when they thought proper, and had the privilege of a double vote [d]. The ſenate alone had the right of examining affairs, and propoſing them in the public aſſembly; but when they had given their opinion, the people were the maſters either to approve or reject it [e]. The ſenators, as I have already

[x] De leg. l. 4. p. 829. D. See alſo Ariſt. polit. l. 4. c. 9.

[y] See Thucyd. l. 1. n. 79. 85. 87.; Ariſt. polit. l. 3. c. 14.

[z] See Herodot. l. 6. n. 56.

[a] Herod. l. 6. n. 82. 85.; Thucyd. l. 5. n. 60. 63.; Diod. l. 12. p. 533.; Plut. t. 1. p. 806. F.

[b] Herod. l. 6. n. 56.; Plut. t. 1. p. 804.

[c] Plut. t. 1. p. 42. E.

[d] Herod. l. 6. n. 57. Thucydides pretends that each king had but one vote, l. 1. n. 20.

[e] Plut. in Lycurg. p. 43. B.

ſaid, were elective. It was by vote and in their aſſembly, that the people proceeded to that important choice [a].

The power of the ſenate appeared very ſoon too ſtrong and abſolute. It was reſolved to give it a check, by oppoſing to it the power of the Ephori. This eſtabliſhment took place about 130 years after Lycurgus *. The Ephori were five in number [b], and remained only a year in office [c]. They were choſen by the people, and often taken from amongſt thoſe of the loweſt condition [k]. Eſtabliſhed to defend the rights of the nation againſt the enterpriſes of the kings and of the ſenate, they had a good deal of reſemblance with the tribunes of Rome. Although their magiſtracy was limited to a year, they became ſo powerful, that, in the end, the whole authority reſted in their hands. The Ephori had a power to expel the ſenators, to put them in priſon, and even to puniſh them with death [l]. The kings were obliged to obey them at the third ſummons [m]. They had a right to fine them, and put them under arreſt [n]. When the kings entered the ſenate, the Ephori were diſpenſed with riſing at their approach [o]; but the kings were obliged to pay them that mark of reſpect [p]. Every month they renewed the oath of fidelity to the ſtate, the Ephori in the name of the republic, and the kings in their own name. The kings obliged themſelves by oath, and promiſed to govern according to the laws and cuſtoms. The oath that the Ephori took in the name of the republic, was, that they would maintain the perſons and authority of the kings as long as they ſhould exactly obſerve their promiſes [q]. For a further check upon the kings, theſe magiſtrates had contrived a very ſingular expedient founded on the ignorance and ſuperſtition of the people.

[a] Ariſt. polit. l. 2. c. 9. p. 330. 331.; Juſtin. l. 3. c. 3.

* The ancients are not agreed upon the time of the inſtitution of the Ephori. The greateſt number, however, refer their original to Theopompus, who reigned 130 years after Lycurgus.

[b] Paul. l. 2. c. 11. [l] Cragius apud Gronov. theſ. Gr. antiq. t. 5. p. 2570.
[k] Ariſt. polit. l. 2. c. 9. p. 330. A. [l] Xenophon de rep. Lac.
[m] Plut. in Agid. & Cleom. p. 800. E.; Corn. Nepos in Ageſil. n. 4.
[n] Corn. Nepos in Paul. n. 3. & 5. [o] Xenoph. de rep. Lacæd. ſub fin.
[p] Plut. t. 2. p. 817. A. [q] Xenoph. loco cit.

Every

Every nine years the Ephori chose a night with a very clear and serene sky. They sat down in the open fields, keeping a profound silence, and their eyes fixed upon the heavens. If they saw a star fall, that is to say, if they perceived one of those luminous exhalations which we often see shoot along the sky, they immediately accused the kings of having incurred the anger of the gods. They suspended them from their functions till they should receive from the oracle an order for their re-establishment [r].

The Ephori had also the charge of watching the conduct of the queens [s]. Lastly, they had the keeping of the public treasure [t], and the general inspection over all the state [u]. Aristotle justly blames the establishment of these magistrates [x]. They caused the same disorders at Sparta, as the tribunes of the people at Rome.

The people also had great authority at Sparta, and a considerable share in the government [y]. The public assemblies solely decided the affairs of the state [z]. It was also in these assemblies that the election of the magistrates was made [a].

The government of Lacedæmon, where the authority was divided by five different bodies, two kings, a senate, five ephori, and the assembly of the people, is a kind of political paradox. The opposition of all these different powers, which reciprocally thwarted each other, should in all appearance have been a perpetual source of intestine troubles and dissensions. Nevertheless we meet in history with no state which has been less agitated than that of Sparta; and Polybius says, that of all the people known in history, none had so long preserved their liberty [b]. This certainly was not the effect of a government so defective in its constitution as was that of Lacedæmon. We can therefore ascribe the cause only to the laws of Lycurgus. So long as they were exactly observed, the interest of the state prevailed

[r] Plut. in Agid. & Cleom. p. 800. B.
[s] Plato in Alcibiad. 1°. p. 441. A.
[t] Xenoph. de rep. Laced. sub fin.
[u] Ælian. var. hist. l. 2. c. 5.
[x] Polit. l. 2. c. 9. p. 332.
[y] Plato de leg. l. 4. p. 829. D.
[z] Thucyd. l. 1. n. 79, 85, 87.
[a] Plut. in Lycurg. p. 43. B.
[b] L. 6. c. 6. p. 491.

over

over all private conſiderations, and Sparta was the terror of her neighbours. Her ruin followed as ſoon as ſhe loſt ſight of them.

In effect, we cannot but allow that there was a great fund of wiſdom and prudence in the laws of Lycurgus. They have been the admiration of the moſt famous politicians of antiquity, and juſtly too, even though they were to be judged by the event. But let us take it along with us, that theſe regulations could only be proper for a ſtate of ſmall extent, and were really practicable only amongſt a people who were not numerous, ſuch as thoſe of which Greece was compoſed. In the time of Lycurgus, they reckoned in Sparta only nine thouſand inhabitants [c], and thirty thouſand in the country [d]. In ſo ſmall a ſtate a people may be educated and governed like a ſingle family. From this principle, I ſhall ſay with Polybius, that the form of the government of Sparta was well enough adapted to it, as long as the Lacedæmonians aimed not at extending the bounds of their dominions. But this ſame government became imperfect and defective from the moment that Sparta ſuffered herſelf to be hurried away by views of ambition, and conceived projects of advancement [e].

ARTICLE III.

Of the Greek Colonies.

THE attention which I have given to the hiſtory of Athens and of Lacedæmon, has occaſioned the omiſſion of an event which ought not however to be forgot. I mean the number of Grecian colonies, which, about the beginning of the ages we are going through, quitted their mother-country, and went to form eſtabliſhments in many parts of Aſia and Europe. In the preceding volume I have indicated the cauſe of thoſe emigrations. There we ſaw

[c] Herodot. l. 7. n. 234.
[d] Plutarch. in Lycurg. p. 44. B.
[e] Polyb. l. 6. c. 6. p. 491. See alſo the Eſprit des loix, l. 4. c. 7.

What

what had been the effect and conſequences of the revolution which Greece underwent when the Heraclidæ came and wreſted the ſceptre from the deſcendents of Pelops, about 80 years after the taking of Troy. The moſt renowned and celebrated of theſe colonies, were thoſe which were formed in Aſia by the Ionians, the Æolians, and the Dorians.

The Trojan war had given the Greeks an opportunity of acquiring a pretty exact knowledge of the Leſſer Aſia. The Ionians anciently eſtabliſhed in Attica, but afterwards ſettled in Peloponneſus, had remained there in tranquillity till ſuch time as the Heraclidæ came to retake poſſeſſion of it. The Achæans, at that time driven from Laconia, fell upon the Ionians, and conſtrained them to quite Peloponneſus. The Ionians took refuge in Attica [f]; but having multiplied to ſuch a degree that the country could no longer maintain ſo great a number of inhabitants, Nileus, that ſon of Codrus whom the Athenians had rejected [g], placed himſelf at their head, and conducted them into Aſia. They took poſſeſſion of a country which was then bounded by Caria and by Lydia. It is that which from them was afterwards called *Ionia*. There they built twelve cities, Epheſus, Colophon, Clazomena, &c. [h]

This colony had been preceded by another emigration, which is not leſs famous in hiſtory. Thoſe of the Achæans who deſcended from Æolus, having been driven from Laconia by the Dorians, who returned into Peloponeſus with the Heraclidæ, found themſelves obliged to ſeek for new lands [i]. They put themſelves under the conduct of Penthileus, that ſon of Oreſtes who had been dethroned by the Heraclidæ. After ſome rambling they fixed themſelves in the Leſſer Aſia, between Ionia and Myſia, and gave that country the name of *Æolia*. Smyrna and many other cities owe their foundation to that colony [k].

[f] See part 2. l. 1. c. 3. art. 6. [g] Supra, p. 20. & 20.
[h] Marm. Arund. ep. 26.; Pauſ. l. 7. c. 2. init.; Ælian. var. hiſt. l. 8. c. 5.
[i] See part 2. l. 1. c. 3. art. 6.
[k] Strabo, l. 13. p. 872.; Vell. Paterc. l. 1. n. 3, 4.

The

The third colony which paſſed about the ſame time from Greece into Aſia, was compoſed of Dorians. They had accompanied the Heraclidæ in their expedition againſt the Athenians in the reign of Codrus. The Heraclidæ were beaten; but their defeat did not prevent their ſeizing the country of Megara, and giving it to the Dorians. A part of this people remained in that country; ſome of them paſſed into Crete; but the far greateſt number eſtabliſhed themſelves in that part of the Leſſer Aſia which from them was called *Doria*. There they built Halicarnaſſus, Cnidos, and other cities. They alſo ſpread themſelves into the iſlands of Rhodes, Cos, &c [l].

I ſhall ſay nothing of ſeveral other colonies which went from Greece about the ſame time, and ſhall paſs over in ſilence thoſe conſiderable ſettlements which we know were made by the Greeks in Italy [m], in Sicily [n], on the borders of the Pontus Euxinus [o], and as far as the coaſts of Africa [p]. This detail would lead us too far. The colonies of the Leſſer Aſia are without contradiction the moſt famous of all thoſe which were ever formed by the Greeks. They prove ſufficiently to what a height this part of Europe was formerly peopled. We are aſtoniſhed, that ſo inconſiderable a nation as the Greeks, ſhut up in the compaſs of a country not equal to a fourth part of France, ſhould have been in a condition to ſend out almoſt at the ſame time ſo great a number of colonies.

This perhaps would be the proper place to propoſe ſome reflections on the facility and inclination which the ancients had to form and ſend ſo many colonies into countries often remote. One might dwell upon that uſage which ſingularly characteriſes the ages of which I am now ſpeaking. One might alſo conclude with much probability, that families multiplied much more at that time than they appear to do now. There might be room for forming many reaſonings on the cauſe of that reſtleſs humour which rendered the

[l] Strabo, l. 14. p. 965.
[m] Marſham, p. 510. [n] Id. p. 463. [o] Id. p. 516. [p] Id. ibid.

ancients

ancients ſo ſubject to migrations, and which led them to change their abode with a facility that always aſtoniſhes us at preſent. In effect, many ages paſſed before the greateſt part of the ancient nations were well eſtabliſhed or fixed for a continuance in the ſame diſtrict. All theſe different objects which I have here indicated, would undoubtedly deſerve to be examined with great attention; but this diſcuſſion would divert us too much from the principal object which ought to employ us in the preſent article. I return therefore to the Grecian colonies.

I ſee nothing particular to ſay on the form of government followed by the different colonies of which I have been ſpeaking. As moſt of theſe tranſmigrations were made only about the time that the republican ſpirit began to be predominant in Greece, the colonies which went from it conformed themſelves to thoſe ideas, and adopted, in conſequence, the republican government. As to the laws, civil and political, that they eſtabliſhed originally, it is to be preſumed, that, in their beginnings, they differed little from thoſe of which I had occaſion to give an account in the ſecond part of this work, in explaining the ancient government of Greece [a]. In proceſs of time only it became neceſſary to make ſuch alterations as were ſuitable to the particular poſition of each colony.

I ſhall carry no further my reſearches into the Grecian hiſtory. My intention is not to deliver all that may be found worth notice in a nation ſo worthy of our ſtudy and of our attention. I ſhall only ſay a word on the revolution which was wrought in the government, manners, and genius of the different ſtates of Greece, during the ages here under conſideration.

Greece in one ſenſe comprehended but one and the ſame people, and, till about the middle of the ages we are now going through, a pretty cloſe uniformity of manners prevailed. But, from that epocha, there is to be obſerved a great variety and diſagreement in the manners and conduct of the

[a] See book 1. c. 3. art. 8.

different ſtates which compoſed the Greek nation. It is eaſy to penetrate the cauſe, if we reflect but a little on the events of which this part of Europe was the theatre.

Government and manners had been originally the ſame or nearly alike in the different ſtates of Greece, although founded by various colonies. Let us run through the firſt ages of the hiſtory of Athens, of Argos, of Sicyon, Thebes, Sparta, Corinth, Mycenæ, we ſhall obſerve no difference in the adminiſtration of theſe different ſtates. We ſee the ſame uniformity ſubſiſt for many ages, and till after the return of the Heraclidæ into Peloponneſus. As yet the Greeks were very ignorant in arts and ſciences, in commerce, navigation, the art military, and politics. This I have proved ſufficiently in the ſecond part of this work, where I endeavoured to make known the ſtate of the Greeks in relation to all theſe different objects. That nation was then unenlightened and very poor, quiet of conſequence, and without ambition. Some ages after the return of the Heraclidæ, the appearance of things was changed. The Greeks began to acquire knowledge; immediately a general revolution in genius was effected, a univerſal impulſe was felt. Here begins the epocha of that variety, and of that oppoſition which ever after reigned in the manners of the different people comprehended under the name of Greeks: oppoſitions which however did not become very perceptible till ſome time after Lycurgus and Solon. Then all the different republics of Greece completed their form of government and conſtitutions, and, by a neceſſary conſequence of events of this kind, their primitive turn of thinking changed alſo. Each ſtate opened its eyes on its own intereſts, and formed laws and maxims relative to its poſition and particular views. A general attention was rouſed to the objects of politics, arts, and commerce. Factions aroſe along with ambition and luxury. Even the riches of genius with which the nation was ſo abundantly provided, were made the beſt of. Orators as well as philoſophers acquired from this moment a degree of eſteem, credit, and authority, beyond the example of any other country.

This

This change was not advantageous to Greece. The opulence of ſome of the republics inſpired them with thoughts of ambition and rivality. Inſenſibly a ſpirit of incroachment and domineering ſeized the different ſtates of that part of Europe. Each of them affected ſuperiority, and aſpired to the direction of the whole nation. The general intereſt diſappeared, and was ſacrificed to particular views. Greece then was torn with factions and inteſtine diviſions. In vain did the patriots attempt to raiſe their voice, and repreſent the fatal conſequences of theſe quarrels; they were not liſtened to. The republics ſeduced and led by fiery orators, tore each other to pieces, and engaged continually in the moſt bloody and obſtinate wars. The iſſue was moſt fatal to the nation. The advantages which the Greeks alternately gained over each other, began by mutually weakening them, and ended by ſowing in all hearts, ſuch ſeeds of hatred and animoſity, as rendered for ever irreconcileable all the different people comprehended under the name of Greeks. It is thus that they paved themſelves the way to ruin by reciprocal loſſes, and by a conduct which put them out of condition of uniting to defend the common liberty. This miſunderſtanding joined to the weakneſs occaſioned by a train of continual wars, at length ruined Greece, and forced her to ſubmit for ever to a foreign yoke.

BOOK II.

Of Arts and Manufactures.

THE objects which we are about to examine in this third part of our work, are of a kind ſomething different from thoſe which employed us in the preceding volume. There we examined the origin and progreſs of the arts among the moſt ancient people. To fulfil this deſign, we were obliged to enter into many details which would now be ſuperfluous. The ages which we are now ſurveying, offer us nothing new of this kind. With the exception of the Greeks, the other nations of whom I have had occaſion to ſpeak, added nothing to the diſcoveries they had been long in poſſeſſion of. I ſhall therefore attend only to ſuch ſtrokes as are capable of characteriſing the genius and taſte which reigned in the enterpriſes, and in the monuments of the Aſſyrians, Babylonians, and Egyptians. Indeed the epocha which at preſent engages our attention, is that of the glory and ſplendor of theſe people. After the conqueſts of Cyrus, ſucceſſively ſubjected to the Perſians, Greeks, and Romans, they fell into abſolute decay, and their genius ſeemed to be extinguiſhed with their liberty.

The hiſtory of the arts among the Greeks in the ſpace of time comprehended in this third part, does not preſent us with objects worthy of much attention. The progreſs of theſe people was, in every kind, much ſlower than thoſe of the Egyptians and Aſiatic nations. The ages we are now going through are not yet thoſe which have immortaliſed Greece. But about 200 years after this epocha, the Greeks took the moſt ſublime flights. They then enriched the arts with all that imagination and taſte could furniſh. They caught the real beauties which neither the Egyptians nor

the

the Aſiatics were ever acquainted with. We ſhall not however enjoy this magnificent ſpectacle; it would be neceſſary for that purpoſe to deſcend to the time of Pericles, or even of Alexander. The bounds I have preſcribed myſelf will not permit it. Let us content ourſelves with contemplating the dawn which uſhered in ſo fine a day.

CHAP. I.

Of the Aſſyrians and Babylonians.

WE have ſeen in the firſt part of this work, that Nineveh owed its foundation to Aſſur, and Babylon to Nimrod [a]. I ſaid there at the ſame time, that the opinion of thoſe among the writers of antiquity who attributed to the ancient Ninus and Semiramis the ſuperb works which have rendered theſe two cities ſo famous, was not to be depended upon [b]. In effect it appears to me improbable, that in the earlieſt times they ſhould have executed ſuch equally immenſe and magnificent ſtructures as are ſpoke of by thoſe authors. I judge them to belong only to the ages which employ us at preſent. This opinion moreover is ſtrengthened by the ſuffrage of a number of hiſtorians, who in all reſpects deſerve infinitely more credit than Cteſias copied by Diodorus and by other writers modern enough [c].

Caſtor, whoſe chronology appears to have been greatly eſteemed by Euſebius and many other writers of merit, reckoned two kings of Aſſyria of the name of Ninus; one who founded Nineveh, and another who mounted the throne in the latter times of that empire [d]. Every thing leads me to believe that we ought to refer to the ſecond Ninus the enlargement and magnificence of Nineveh, improperly attributed by Cteſias and his copiers to the firſt Ninus, the founder of the Aſſyrian empire.

[a] Book I. c. 1. art. 3. [b] Ibid. b. 2. c. 3. [c] See Marſham, p. 477.
[d] *Apud* Syncell. p. 205. 206. A

As

As to Babylon, it is beyond a doubt that we ought to place the conſtruction of all the works which have immortaliſed that capital, under the reign of its laſt ſovereigns. Beroſus [e], Megaſthenes [f], Herodotus [g], and Abydenus [h], aſcribe the honour of all the embelliſhments of Babylon to Nebuchadnezzar, and to Nitocris his ſpouſe. Their teſtimony is conformable to that of the holy ſcripture [i]. I believe myſelf therefore ſufficiently authoriſed to refer to the ages treated of in this third part, all that the ancients have delivered to us upon the grandeur and magnificence of Nineveh and Babylon.

Here no doubt is the place to make a particular deſcription of theſe two cities. But, in the firſt place, we have left us but very imperfect notions of Nineveh. Of all the writers of antiquity who have reached down to us, not one had ſeen that capital. It had been deſtroyed, and that a long time, when Herodotus the moſt ancient of thoſe authors wrote. As to Babylon, the ſubject has been treated ſo often and in ſo many works which are in the hands of all the world, that I deem it ſuperfluous to enlarge upon it. I ſhall therefore content myſelf with propoſing ſome general reflections upon theſe two cities.

The circumference of Nineveh and of Babylon, if we take it upon the common opinion, was of a prodigious and incredible extent. The firſt of theſe two cities formed, according to the ancients, an oblong ſquare, the two greater ſides of which were each of 150 ſtadia, and the two leſſer of 90. Its total circuit was conſequently 480 ſtadia [k]. We commonly eſtimate theſe 480 ſtadia at 25, or even 30 of our common French leagues. But according to the opinion of Monſieur de L'Iſle, founded upon good authorities, the ſtadia of remote antiquity ſhould be eſtimated much lower [l]. According then to the reduction which I propoſe, the

[e] *Apud* Joſ. adverſ. Appion. l. 1. c. 6.
[f] *Apud* Euſeb. præp. evang. l. 9. c. 41. p. 457. B.
[g] L. 1. n. 185.
[h] *Apud* Euſeb. *loco citat.* p. 456.
[i] Daniel, c. 4. v. 27.
[k] Diod. l. 2. p. 115.
[l] Acad. des ſciences, ann. 1721, M. p. 80. 81.

ground-

ground plan of Nineveh could occupy only about six square leagues [m]. That city must have been consequently something more than seven times greater than Paris *.

We read, it is true, in the prophet Jonah, that Nineveh was a great city of three days journey [n]. The greatest part of commentators have concluded from thence, that Nineveh could not be surrounded in less than three days. That expression appears to me rather to signify that three days at least were necessary to travel into every part of it. The explication that I propose, appears to me exactly conformable to the mission of the prophet. He had in effect been sent to Nineveh to preach repentance, and it was only by going through the interior parts of the city, that he could declare to its inhabitants the menaces of the Almighty. So the sacred text says that Jonah entered the city a day's journey, and cried [o].

Nineveh moreover was not peopled in proportion to the extent of its walls. We read in the same prophet I have just now quoted, that there were then in that city six score thousand persons that could not discern between their right hand and their left [p]; an expression which is understood, and rightly too, to mean children of the lowest age. It is to be presumed from this passage, that there could not be in Nineveh more than seven hundred thousand souls or thereabouts, the children commonly making but the fifth part of the inhabitants of a city. Nineveh then contained not many more people than Paris, although its compass was infinitely greater. Undoubtedly that city inclosed many very spacious gardens; a custom established from the earliest times, and which still continues in the eastern cities [q].

I shall say the same thing of Babylon, and on a much better foundation; for the ancients speak in reality of gardens,

[m] Ibid. ann. 1725, p. 54. To speak more exactly $5\frac{915895}{1234321}$ square leagues.

* The surface of Paris is $\frac{11389825}{14470416}$ parts of a square league. Thus the surface of Nineveh was more than seven times $7\frac{3}{10}$ greater than that of Paris.

[n] C. 3. v. 3.

[o] C. 3. v. 4. See Father Hardouin *ad* Plin. l. 6. sect. 16. not. (25.)

[p] C. 4. v. 11.

[q] Acad. des sciences, ann. 1725, M. p. 54. 55.

and

and even of arable lands being inclosed within its walls [r]. But otherwise they are by no means agreed upon the extent of that city. I thought the preference due to the measures of Herodotus, whose testimony is much superior to that of all the other writers. He had been at Babylon at a time when that city was not entirely fallen from its ancient splendor; an advantage which Clitarchus, Diodorus, Strabo, and the rest could not have had. According then to Herodotus, the compass of Babylon was equal to that of Nineveh, that is to say, 480 stadia [s]. But Babylon was a perfect square, and consequently greater than Nineveh *. According to the proportion that I have already indicated, we ought to estimate the ground-plan of Babylon at more than six square leagues of surface †. That city was therefore near eight times as big as Paris ‡. We can say nothing of the number of the inhabitants it contained: only I presume, that Babylon might be peopled in the same proportion as Nineveh.

Authors have greatly extolled the public works and edifices which once rendered Babylon one of the wonders of the world. We may reduce all these objects to five principal heads: 1. the height of its walls, 2. the temple of Belus, 3. the hanging gardens, 4. the bridge built over the river Euphrates, and the quays which lined that river, 5. the lake and canals dug by the hand of man to distribute the waters of the Euphrates.

All these works so marvellous in the judgment of antiquity, appear to me to have been extremely exaggerated by the authors who have spoke of them. How can we conceive in effect, that the walls of Babylon could have been

[r] Diod. l. 2. p. 121; Q. Curt. l. 5. c. 1. [s] L. 1. n. 178.

* Notwithstanding what Strabo says, l. 16. p. 1071. C.

† In strictness $6\frac{154074}{1234321}$ square leagues.

‡ About $7\frac{4}{5}$. If we were to judge of the greatness and extent of Babylon from a fact related by Aristotle, what an idea should we form of it? He says, that when the city was taken, there was one quarter in it, where the news had not yet arrived three days after. De rep. l. 3. c. 3. t. 2. p. 340. 341. I do not conceive how an author like Aristotle could [illegible]iously relate such an absurdity.

318 feet high, and 81 in thickneſs, in a compaſs of near ten leagues [t].

I ſhall ſay the ſame of that ſquare building, known under the name of *the temple of Belus*. It was compoſed of eight towers placed one above another, diminiſhing always as they went up. Herodotus does not tell us what was the height of this monument [u]. Diodorus ſays that it ſurpaſſed all belief [x]. Strabo fixes it to one ſtadium [y], a meaſure which anſwers nearly to ſix hundred of our feet *. For in the time of this geographer, the ſtadia were much more conſiderable than in the firſt ages †. The entire maſs of this building ought to have been anſwerable to its exceſſive height; and this is alſo the idea that the ancients deſigned to give us of it. We may judge by the following fact. Xerxes had entirely demoliſhed this temple. Alexander undertook to rebuild it. He deſigned to begin by clearing the place, and removing the ruins. Ten thouſand workmen who were employed two months in this work, were not, ſay they, able to finiſh it [z].

The riches incloſed in the temple of Belus were proportioned to its immenſity. Without ſpeaking of the tables and cenſers, the cups and other ſacred vaſes, of maſſy gold, there was a ſtatue 40 feet high; which alone weighed a thouſand Babyloniſh talents. In ſhort, according to the inventory that the ancients have given us of the riches contained in this temple, the total ſum would amount to two hundred and twenty millions and a half of French livres. Exaggerations like theſe deſtroy themſelves.

As to the hanging gardens, according to all appearance they never exiſted. The ſilence of Herodotus on a work ſo ſingular and ſo remarkable, determines me to place in

[t] Herod. l. 1. n. 178. Herodotus on this occaſion could only ſpeak from the accounts of the inhabitants. When he was at Babylon, the walls were more than three fourths deſtroyed, as he tells us himſelf, l. 3. n. 159.

[u] He only ſays that it was four ſtadia in compaſs, l. 1. n. 181.

[x] L. 2. p. 123. [y] L. 16. p. 1072.

* The towers of the church of Notre Dame are only 204 feet in height.

† We cannot reckon them leſs than 95 fathom 2 feet 11 inches.

[z] Strabo, l. 16. p. 1072.; Arrian. de exped. Alex. l. 7. p. 480.

the rank of fables all that the other writers have delivered upon this pretended wonder. Herodotus had carefully viſited Babylon. He enters into ſuch details as prove that he has omitted none of the rarities of that city. Can we preſume that he would have paſſed over in ſilence ſuch a work as the hanging gardens? All the authors who have ſpoke of it are of much later date than this great hiſtorian. None of them except Beroſus * ſpeaks on his own teſtimony. It is always on the report of others. Diodorus had extracted from Cteſias what he ſays of theſe famous gardens. There is alſo great appearance, that Strabo had drawn from the ſame ſource. In a word, the manner in which Quintus Curtius expreſſes himſelf, ſufficiently ſhews how much the exiſtence of theſe gardens appeared to him ſuſpicious. He judged they owed the greateſt part of it to the imagination of the Greeks [a].

Let us now ſpeak of the bridge of Babylon, which the ancients have placed in the number of the moſt marvellous works of the eaſt. It was near one hundred fathoms in length, and almoſt four in breadth [b]. We cannot deny but that a great deal of art and labour was neceſſary to lay the foundations, which it could not be eaſy to ſettle in the bed of an extremely deep and rapid river, which alſo rolls along a prodigious quantity of mud, and whoſe bottom is entirely ſandy. They had therefore taken many precau-

* We know that Beroſus never ſtuck at exaggerating when he had a mind to exalt the wonders of his country.

[a] *Super arce vulgatum Graecorum fabulis miraculum penſiles horti ſunt*, l. 5. c. 1. p. 314. There was probably at Babylon ſome hill lined with terraſſes, and adorned with trees. This kind of garden may have been enough for a heated imagination to give birth to the deſcriptions which we read at this time in certain authors.

[b] Diod. l. 2. p. 121. According to that author, the bridge of Babylon was 5 ſtadia in length and 30 feet in breadth. Reducing theſe dimenſions to our meaſures, this bridge may have been 477 fathom 2 feet 7 inches long. This length, as we ſee, is in no ſort of proportion to the breadth. Beſides, Diodorus ſays, that the bridge was built in the narroweſt place of the Euphrates. We learn from Strabo, l. 16. p. 1073. A. that at Babylon this river was only one ſtadium in breadth. I have thought fit in conſequence to abandon the text of Diodorus, and fix the length of the bridge at one ſtadium.

tions

tions to ſecure the piers of the bridge of Babylon. They were built of ſtones joined and faſtened together with cramps of iron, and their joints filled with melted lead [c]. The front of the piers, turned towards the current of the Euphrates, was defended by buttreſſes extremely advanced, which diminiſhed the weight and force of the water, by cutting it at a great diſtance [d]. Such was the bridge of Babylon.

While we do juſtice to the ſkill of the Babylonians, in conducting theſe works, we cannot help remarking the bad taſte, which, at all times, reigned in the works of the eaſtern nations. The bridge of Babylon furniſhes a ſtriking inſtance of it. This edifice was abſolutely without grace, or any air of majeſty. The breadth of it was in no ſort of proportion to its length *. The diſtance between the piers was alſo very ill contrived. They were diſtant from each other only eleven feet and a half [e]. Finally, this bridge was not arched [f]. We may judge of its effect on the view.

The Babylonians, however, were not the only people who were ignorant of the art of turning an arch. This ſecret, as far as I can find, was unknown to all the people of remote antiquity, who, generally ſpeaking, do not appear to have been very ſkilful in ſtone-cutting.

As for the quays which lined the Euphrates, we may believe that they were grand and magnificent; but I ſhall not eaſily believe that they ſurpaſſed thoſe which we have daily under our eyes. In this reſpect, I believe, Paris may diſpute it for magnificence, and for the extent of the work with all the cities of the univerſe.

I ſhall ſpeak more particularly in the following book of the canals, and of the lake, for the diſcharge and paſſage

[c] Herod. l. 1. n. 186. [d] Diod. ibid.

* Following the ſame reduction that we have propoſed, this bridge was 95 fathom 2 feet 11 inches in length, and 4 fathom 2 feet 7 inches in breadth. The length of the Pont Royal is only 72 fathom; yet its breadth is 8 fathom 4 feet †.

[e] Diod. l. 1. p. 21. [f] Herod. l. 1. n. 186.; Diod. *loco citato.*

† *The extent of Weſtminſter bridge is 1223 feet from wharf to wharf, and its breadth within the battlements 44 feet.*

of the waters of the Euphrates. We ſhall ſee there whether there is not a good deal of abatement to be made in the account of the ancients, when they make the circumference of the lake of Babylon amount to 1200 ſquare ſtadia [a]; that is to ſay, to more than fifty leagues *, and the depth of it to about 120 feet [b]; adding, that this lake was lined with ſtones throughout [i].

I do not, however, pretend by theſe reflections to extenuate altogether the grandeur and magnificence of Nineveh and of Babylon. I only think we ſhould make a conſiderable allowance for exaggeration, in what the ancients have delivered to us concerning them. I think, moreover, that the Aſſyrians and Babylonians had no idea of what we call the orders of architecture. I judge ſo from the little taſte which the Aſiatics in all ages diſcovered in their buildings †. I believe then that the monuments which formerly rendered Nineveh and Babylon ſo famous, were more remarkable for their ſingularity, and for the profuſion of ornament, than by the ſymmetry and grace of their conſtruction. That elegance, and thoſe beautiful proportions which charm and allure us in the Grecian architecture, were, and ſtill are, unknown in the Indies, in China, in Perſia, and, generally ſpeaking, in all the eaſt.

We can ſpeak but very imperfectly of the taſte of the Aſſyrians and Babylonians in ſculpture; only we ſee that this art muſt have been very much practiſed among theſe people. The ſcripture ſpeaks of a golden ſtatue ſixty cubits in height, and ſix in breadth, ſet up by the orders of Nebuchadnezzar [k], without reckoning many other repreſentations of divinities and princes which filled the temples

[a] Megaſthen. apud Euſeb. praep. evang. l. 9. c. 41. p. 457. C.; Diod. l. 2. p. 122.

* 50 leagues $\frac{3}{17}\frac{4}{17}\frac{7}{18}$.

[b] Megaſthen. *loco cit.* Theſe 120 feet make 114 feet 7 inches, Paris meaſure. Diod. *loco cit.* makes the lake of Babylon only 35 feet in depth. It is ſtill a great deal.

[i] Herod. l. 1. n. 185. Diod. l. 2. p. 122. ſay, that it was lined with a wall of bricks cemented with bitumen.

† From this propoſition we muſt except the Greeks of Aſia Minor.

[k] Dan. c. 3. v. 1.

and

and palaces of Babylon [l]. It is certain then, that the Babylonians worked much in ſculpture; but is it certain alſo, that taſte and correctneſs diſtinguiſhed the works of their artiſts? This may very reaſonably be doubted. In effect, we do not ſee that the Aſiatics ever knew how to deſign with taſte and preciſion. I judge ſo, not only by the modern productions of theſe nations; but even by ſuch of their monuments as have eſcaped the injuries of time. The figures which we ſee on all that remains of the bas reliefs of the ancient orientals, are clumſy and incorrect, without attitude, grace, or variety of expreſſion. We ſhall conceive ſtill a worſe opinion of the artiſts of Babylon, if we admit that the ruins, now known under the name of *the ruins of Perſepolis*, are the remains of a palace built by the firſt ſovereigns of Perſia. The ſtatues and bas reliefs which are yet to be ſeen there, are aſſuredly of the worſt taſte and the meaneſt execution [m]; yet it appears that theſe works, as indifferent as they are, would have been above the hands of the ancient ſculptors of Babylon. I ſay it on the authority of Diodorus, who tells us, that the palaces of Perſepolis and Suſa were built by artiſts whom Cambyſes tranſported out of Egypt into Perſia, after he had ſubjected that empire [n]. Nevertheleſs, when Cambyſes made himſelf maſter of Egypt, he was already ſo of Babylon, and conſequently had it eaſily in his power to have taken thence whatever workmen he ſhould have believed capable of executing the magnificent works he had reſolved to erect. If this prince then thought it neceſſary to tranſport Egyptian artiſts into Perſia, I think we may fairly conclude that he eſteemed thoſe of Babylon incapable of fulfilling the grand and magnificent projects he had conceived. For what other motive could have engaged him to ſuch a ſtep? With equal talents their being at hand ſhould have determined Cambyſes to prefer the Babylonian workmen. In the following article, I ſhall again have occaſion to return to the manner

[l] Dan. c. 3. v. 4.; Diod. l. 2. p. 122. 123.
[m] See Chardin, t. 2. p. 149. &c.; Le Bruyn, t. 2. p. 285.
[n] L. 1. p. 55. & 56.

and

and character of theſe people in works of taſte and genius.

Let us otherwiſe do juſtice to the Babylonians on their proficiency in many branches of the arts which they appear to have very well underſtood. In the number of theſe I ſhall place, for example, the foundery of metals. The great quantity of ſtatues of gold, ſilver, and bronze, which decorated the temples of Babylon *, prove it ſufficiently. I might alſo enlarge upon the ſkill of the Babylonians in the manufactures of the loom, and particularly in works of embroidery; but I reſerve theſe details for the article in which I ſhall treat of the manners and cuſtoms of theſe people. What I ſhall there have occaſion to ſay of their luxury and magnificence, will not permit us to doubt of that degree of perfection to which the Babylonians had carried a great part of the arts in the brilliant ages of their monarchy.

I ſhould have ſpoken of the temple of Solomon, and of all the equally curious and magnificent works which we know to have been executed by the orders of this prince. But the hiſtory and the monuments of the Jewiſh nation do not enter into the plan which I have propoſed. I have never treated of them otherwiſe than incidentally, and when it was neceſſary to have recourſe to them to clear up and aſcertain the ſtate of the arts in Aſia and Egypt, in the ages which formed the object of the firſt and ſecond parts of this work. The epocha which we are now going through, diſpenſes with our borrowing any thing from the hiſtory of the choſen people. We ſhall find enough of reſources in profane writers to eſtabliſh the facts of which I am to give an account in this third part.

* Dan. c. 5. v. 4.; Herod. l. 1. n. 181.; Diod. l. 2. p. 122, 123.

CHAP.

CHAP. II.

Of the Egyptians.

I Have ſaid, that, according to all appearances, we ought to abate a great deal of the idea which the ancients have deſigned to give us of the monuments conſtructed by the Aſſyrians and Babylonians. We have the better authority for this, as nothing remains at this time capable of juſtifying the marvels that antiquity publiſhed of Nineveh and Babylon. Thus we are not obliged to admit relations often repugnant to reaſon. We ought not to paſs abſolutely the ſame judgment of the facts which ancient authors have tranſmitted to us upon the monuments of the Egyptians. I ſhall obſerve at firſt ſight, that the writers of antiquity do not appear to have given into the ſame exaggerations upon the Egyptian edifices as upon thoſe of Aſia. Beſides, the obeliſks and pyramids ſubſiſt to this day, without ſpeaking of an infinity of other monuments, whoſe ruins alone may enable us to judge of the grandeur and magnificence which reigned in the enterpriſes of the Egyptians. What we have under our eyes, confirms almoſt all that ancient authors have been able to ſay upon this ſubject. Thus we are able to determine what credit is due to their teſtimony, and to judge of the facts they lay before us.

I have ſpoke, in the ſecond part of this work, of the city of Thebes, of the obeliſks, and of all the other monuments whoſe conſtruction I thought belonged to the ages which then employed us. As for the pyramids, the writers of antiquity agee neither on the time nor the authors of theſe ſingular works. They are commonly placed in the number of the moſt ancient monuments of Egypt. Nevertheleſs, I believe this may be doubted. Homer, who makes frequent mention of Egypt, who relates many ſingularities of this country, who ſpeaks of Thebes and of its hundred gates, ſays nothing of the pyramids.

This

This ſilence leads me to believe, that theſe extraordinary monuments did not exiſt, or at leaſt were but juſt finiſhed in his time. I preſume, in conſequence, that they could have been erected only in the ages which employ us at preſent, perhaps half a century before or after Homer *.

I think it unneceſſary to dwell upon a long deſcription of the pyramids. We know that the largeſt of the three which are ſome leagues diſtant from Cairo, forms a ſquare each ſide of whoſe baſe is 660 feet. Its circumference of conſequence is 2640 feet. It has near 500 feet of perpendicular height. Its ſummit is terminated by a platform, each ſide of which may be 16 or 17 feet. The ſolid contents of the pyramid is 313,590 cubic fathoms [p]. This amazing maſs is compoſed of ſtones of an extraordinary ſize. There are many of them 30 feet long, by 4 in height, and 3 in breadth [q].

Herodotus relates, that a hundred thouſand workmen were employed at the ſame time in the conſtruction of this pyramid [r]. They were relieved by an equal number every three months. Ten whole years were employed in hewing and conveying the ſtones †. Twenty more were neceſſary to

* It appears pretty certain that this poet lived ſomething more than 900 years before J. C. The date I aſſign the pyramids, agrees perfectly with that given them by Diodorus, l. 1. p 72.

[p] Reg. ſcient. acad. hiſt. autore J. B. Duhamel, p. 428.; Sicard. mem. des miſſ. du Levant, t. 7. p. 170. 171.

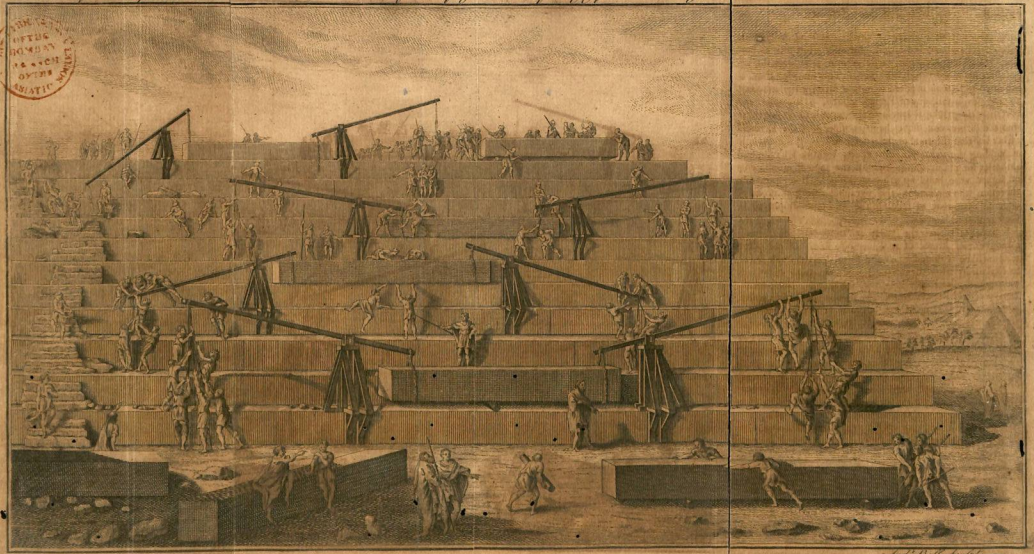
[q] Herod. l. 2. n. 124.; Pietro d'ella Valle, let. 11. t. 1. p. 224. 225.; Maillet, deſcript. de l'Egypte, p. 224. 230. 231. 253.

[r] L. 1. n. 124.; Diod. l. 1. p. 73. and Plin. l. 36. ſect. 17. ſay three hundred and ſixty thouſand.

† Herod. l. 2. n. 124.; Diod. l. 1. p. 72.; Plin. l. 36. ſect. 17. p. 738. ſay that the ſtones employed in building the pyramid were brought from Æthiopia, and from Arabia. This fact does not appear to me to be well eſtabliſhed, In the firſt place, it is not likely that the kings of Egypt having excellent materials at hand, ſhould have unneceſſarily expended immenſe ſums to bring them from afar. Again, the ſtones of the pyramid have too near a reſemblance to thoſe which are found in the neighbourhood, for us to imagine that they were not taken thence. Thevenot, t. 2. p. 484. and Vanſleb. relat. d'Egypte, p. 138. I ſhould only think that they may have brought the marble which covered the pyramids on the outſide from the neighbourhood of the Red ſea, and from the Upper Egypt.

finiſh

Vol. III. Plate III. p. 65. Construction of the Pyramids of Egypt according to Herodotus



And.r Bell Sculpt.

niſh this enormous edifice [t], which contained in its inſide galleries, chambers, and a well. An inſcription tells us how much it had coſt for leeks, garlic, onions, and ſuch like vegetables furniſhed to the workmen. This ſum, ſay they, amounted to ſixteen hundred talents of ſilver [u], that is to ſay, to near ſeven millions of French money. This object was certainly the principal article of the expenſe. I do not think that the ſurplus can have been conſiderable; or I would rather ſay that the food of the workmen was all the expenſe of building the pyramids. In effect, I think I have good authority for maintaining, that all the ancient monuments of Egypt were built by arbitrary taſks [x]. The monarchs therefore who undertook the pyramids, were at no other expenſe than that of feeding the workmen employed in theſe immenſe labours.

I have ſaid that the great pyramid was built almoſt throughout of ſtones of an enormous ſize. Our modern authors have reaſoned much and formed many conjectures, to explain by what means the Egyptians could raiſe ſuch enormous maſſes to the height we ſee them. Theſe doubts have probably been occaſioned by ſome writers of antiquity, who ſpeak of that operation but in a very vague and uncertain manner. Diodorus ſays, that they accompliſhed the building of the pyramids by means of terraſſes diſpoſed in an inclined plane [y]. He adds to this relation ſuch circumſtances as cannot fail to render it very ſuſpicious to whoſoever will reflect upon it. What we read in Pliny is ſubject to the ſame cenſure. This author ſeems to have copied Diodorus, not omitting however to diffuſe his uſual obſcurity on what he borrows from the Greek hiſtorian [z]. Nevertheleſs it was very eaſy, by conſulting Herodotus, to form a very ſimple and a very juſt idea of the manner in which the pyramids were conſtructed.

According to this great hiſtorian, the pyramids were formed by diſtinct courſes of ſtones, which courſes ſucceſſively

[t] Herod. Diod. Plin. *locis cit.*

[u] Herod. l. 2, n. 125.; Diod. l. 1. p. 73.; Plin. l. 36. ſect. 17. p. 738.

[x] See Ariſt. de rep. l. 5. c. 11. t. 2. p. 407. E.; Diod. l. 1. p. 73. & 74.

[y] L. 1. p. 73. [z] See l. 36. ſect. 17.

diminiſhed in ſize, as the proportions of the edifices required it. Every courſe was ſo much within that immediately below it, as to make each front of the pyramid form a ſort of ſtair. The relations of modern travellers agree perfectly with this. It is even yet eaſy at preſent to count the number of courſes which form the great pyramid [a]. This fact being admitted, we ſee that only time and patience were neceſſary to raiſe the heavieſt ſtones to any height whatever. A very ſimple machine, and according to Herodotus very eaſy to manage, placed upon the firſt courſe, ſerved to raiſe the ſtones deſtined for the conſtruction of the ſecond. The ſecond being finiſhed, another machine of the ſame I have been ſpeaking of was fixed upon it, and ſo on for the reſt [b]; one or more of the machines being always left upon each of the courſes already laid, to ſerve ſucceſſively for raiſing the ſtones from ſtep to ſtep *. By repeating this operation as often as was neceſſary to form the height of the pyramid, they accompliſhed the raiſing the ſtones with eaſe to its utmoſt ſummit. Such, by the report of Herodotus, was the manner that the body of this monſtrous edifice was conſtructed.

The ſame author teaches us alſo the way they fell upon for the exterior covering of the pyramid; for it is certain that they had all originally an outward coat, whether of ſquare flags, of marble, or of bricks, or of ſmall ſtones, in ſuch a manner that they preſented to the eye only a perfectly even ſlope, ſuch as we ſee at preſent in moſt of theſe buildings [c]. It is true, that at this time the great pyramid preſents us on each of its ſides only a kind of ſtair; but it is eaſy to con-

[a] See Greaves pyramidograph. p. 11.; Thevenot, t. 2. p. 412. 413.; Vanſleb. relat. de l'Egypte, p. 140.; P. Lucas, Voyage du Levant, t. 1. p. 45.

[b] Herod. l. 2. n. 125.

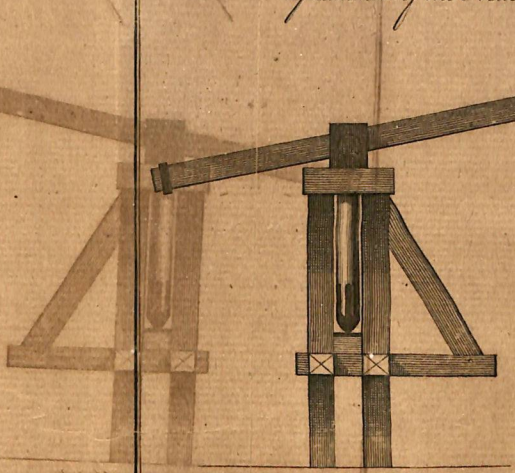
* Herodotus gives us alike to underſtand, that the ſame machine ſerved for the whole building, and that the management of it conſiſted in tranſporting that machine upon all the courſes of the pyramid ſucceſſively. But I have thought proper to prefer the operation that I have indicated. It is both more natural and of quicker diſpatch.

[c] Greaves, pyram. p. 20. 22.; Thevenot, t. 2. p. 411.; P. Lucas, t. 1. p. 46.

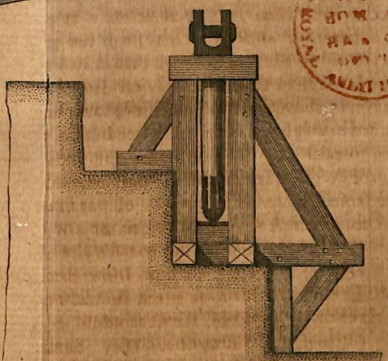
vince

Vol. III. Pl. II. fl. 66.

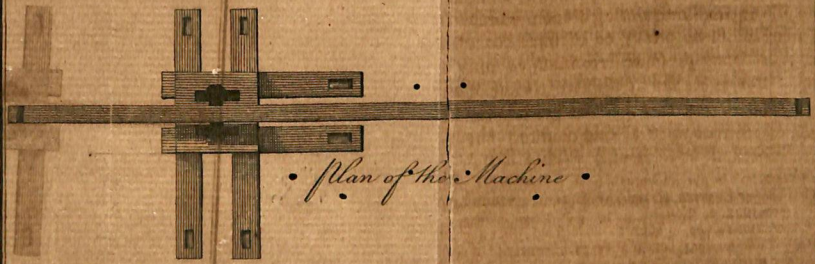
Explanation of the Machine indicated by Herodotus



Elevation of the Machine



Profile of the Machine



Plan of the Machine

Scale of 1 2 3 Fathoms

A. Bell Sculp.

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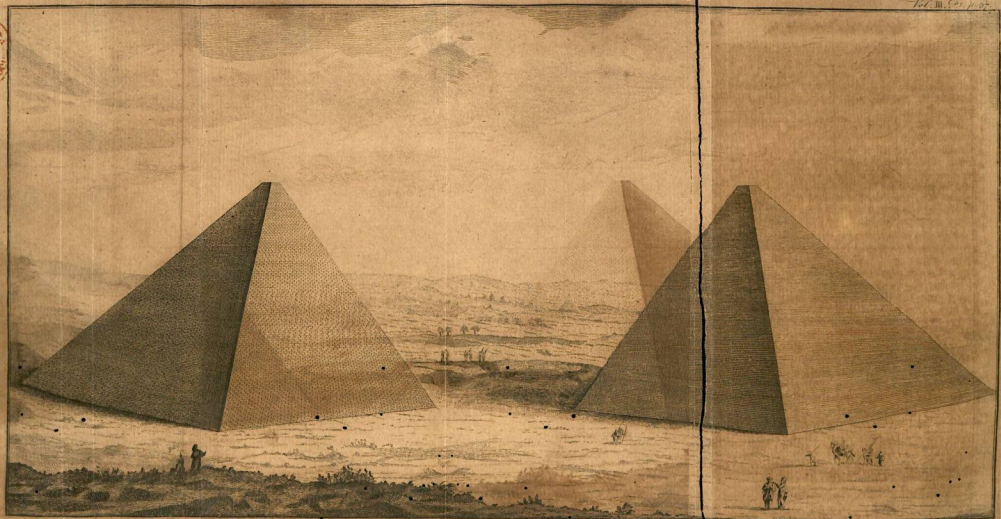

A. Pyramid Coated. A. Pyramid without the Coating. T. Phian Sculp.

vince ourſelves, that this enormous maſs was originally overcaſt with marble, which has diſappeared through the injuries of time, or rather by the avidity of the Arabs [d]. Herodotus tells us then what good ſenſe alone would have dictated; that is to ſay, that they began the coating of the pyramids from the ſummit [e].

Under many of theſe edifices they had contrived ſubterraneous paſſages which it is now impoſſible to penetrate. The ancients have left us no particular deſcription of them. A well which Pliny mentions [f], and which we ſtill ſee in our days [g] in the inſide of the great pyramid, ſerved probably for an entrance into theſe ſubterraneous places. Herodotus ſays, that they had brought thither the waters of the Nile by an aqueduct dug under the earth, and directed in ſuch a manner, that the pyramid formed a ſort of iſland [h]. Pliny gives us to underſtand the ſame thing [i]. Theſe ſubterraneous works, ſuppoſing there is no exaggeration in the relation of the authors juſt quoted, were at leaſt as conſiderable as the pyramids themſelves. We muſt grant this, if we conſider, that theſe edifices are near two leagues diſtant from the Nile, and are built upon a hill above an hundred feet higher than the level of that river [k]. We know, that all the pyramids except the great one are cloſed and inacceſſible. Common opinion will now have it, that it has been open only ſince the conqueſt of Egypt by the Mahometans. It is certain nevertheleſs, that it was ſo in the time of Strabo. What he ſays of the inſide of that building, and of the tomb which is found there [l], is abſolutely conformable to all the modern relations. Plutarch ſpeaks alſo of the echoes produced there by the voice [m]; a circumſtance related equally by our travellers [n]. It is pretty ſingular however,

[d] Maillet, deſcript. de l'Egypte, p. 224. 227. 228. 253.; Sicard, mem. des miſſions du Levant, t. 2. p. 282.; Mem. de Trev. Août 1723, p. 4125.

[e] L. 2. n. 125. [f] L. 36. ſect. 17.

[g] Thevenot, p. 420. 421.; Maillet, p. 249.; Greaves, pyram. p. 14..; Vanſleb. p. 142. This well is only forty feet deep at the utmoſt.

[h] L. 2. n. 124. [i] L. 36. ſect. 17.

[k] Greaves, pyram. p. 7.; Maillet, p. 220. [l] L. 17. p. 1161.

[m] T. 2. p. 903. A.

[n] Greaves, pyram. p. 15.; P. Lucas, voyage du Levant, t. 1. p. 43.

that all the other authors of antiquity ſhould have been ſilent upon this article, and that, in general, they ſhould have left us no minute deſcription of the different conduits, the ſeveral galleries and the chambers which we meet with in the inſide of the great pyramid, no more than of the tomb placed in the higheſt apartment.

Scarce any of thoſe who in our days have had occaſion to ſpeak of the pyramids, have failed to cloſe the deſcription with ſome ſtrokes of a trite and trivial morality upon the motives and object of thoſe ſingular monuments. I ſhall not take up time with refuting theſe vain declamations, repeated from one to another, and dictated by ignorance and want of judgment. A little more knowledge of the manner of thinking of the ancient Egyptians, with ſome critical examination, would have ſpared us all theſe ſervile repetitions of our modern writers, confined almoſt always in one and the ſame circle of ideas. Let us endeavour to leave it, and explain the reaſons which may have determined the ſovereigns of Egypt to raiſe edifices ſo ſingular as the pyramids are in all reſpects.

The Egyptians were perſuaded, that death did not ſeparate the ſoul from the body, but that it remained attached to it as long as it could continue entire [o]. It is from this idea, that theſe people took ſo many precautions to preſerve their carcaſes from corruption, and to ſecure them from all accidents which might occaſion their deſtruction. Hence the cares they gave themſelves and the expenſes they underwent to embalm the dead, and depoſite them in places covered from all inſult. The principal attention of the Egyptians was turned to this object. Thus they regarded their palaces and houſes as inns for but a tranſient abode, giving, by way of diſtinction, the name of eternal habitations to the tombs [p].

[o] Serv. ad Æneid. l. 3. v. 67. [p] Diod. l. 1. p. 60. 61.

We read in Herodotus, that Cambyſes King of Perſia not having been able to vent his rage upon Amaſis, the laſt of the ſovereigns of Egypt, commanded the dead body of this prince to be untombed, and, as the height of ill-treatment, he cauſed it to be burnt. Herod. l. 3. n. 16.

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The ſituation of Egypt, expoſed every year to the inundations of the Nile, obliged the Egyptians to take all ſorts of precautions to prevent the quick deſtruction of their ſepulchres. It was for this reaſon, that they placed them on rocky ſituations ſufficiently elevated to be ſecure from the overflowings of the river. There they dug caverns in which the mummies were depoſited. They afterwards employed all ſorts of means to keep the knowledge of them a ſecret. The entrances of theſe tombs, made in the form of a ſquare well, were ſo artfully covered, that they cannot at this day be diſcovered without great ſearch and much attention [q].

Theſe facts being eſtabliſhed, and they are very certain, the conſtruction of the pyramids becomes very eaſy and natural. The intention of the ſovereigns who built them, was to employ all the means which human art could furniſh to ſecure their dead bodies againſt all events, and in ſome ſort to aſſure them of an eternal duration. In this view, they contrived to place them in edifices whoſe ſolidity ſhould be proof againſt time and other injuries. The Egyptian architects choſe for that effect the pyramidal form, better adapted by its ſtructure than any other, to brave the injuries of time. In conſequence of the ſame principles the foundations of theſe edifices were laid on rocks [r]. Yet not ſatisfied with all theſe precautions, the kings of Egypt drained every ſource of genius and induſtry to hide and diſguiſe the place where their dead bodies were depoſited *. This project is abſolutely viſible in the conſtruction of the inſide of the great pyramid [t].

Let us join to theſe motives, the maxims of a barbarous and inhuman policy, which may alſo have contributed to the conſtruction of theſe prodigious edifices, ſo common in ancient Egypt. We know what was formerly the fertility of that country, and the little time and care it coſt to cultivate

[q] Pietro della Valle, lett. 11. t. 1. p. 231.; Maillet, p. 276. 282.

[r] Plin. l. 36. ſect. 16. p. 737.; Maillet, deſcript. de l'Egypte, p. 219. 222.; Greaves, pyramidograph. p. 7. 21. 23. *apud* Thevenot, t. 1.

*. See Herod. l. 3. n. 16; Diod. l. 1. p. 57.

[t] Pietro della Valle, lett. 11. p. 225.; Maillet, p. 217. &c.

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the grounds. That innumerable multitude of inhabitants which then peopled Egypt, enjoyed great abundance and much leiſure. It is pretended, that under the reigns of ſeveral monarchs there had been many commotions and troubles occaſioned by that idle and eaſy life [t]. In order to prevent all factions and cabals, ſome ſovereigns thought proper to find full occupation for their ſubjects even in time of peace. In that view, they contrived the building of the pyramids; an enterpriſe which muſt neceſſarily occupy, and that for a long time, many thouſands of men. This political reaſon has not eſcaped Ariſtotle [u]. It was even perceived by Pliny, who however neglected it to indulge his uſual fondneſs for vain and frivolous declamations [x].

I think then, that a double motive may be diſcovered in the conſtruction of the pyramids: one dictated by care for the future, and the other by policy; but as much as the firſt of theſe motives may appear excuſable, ſo much ought the other to appear odious and deteſtable. So we read in hiſtory, that the memory of the ſovereigns who had enterpriſed theſe immenſe buildings was held in execration. They became, even in their lifetime, the objects of public hatred and deteſtation; and theſe monarchs were ſo terrified with the complaints and murmurs which they ſaw ariſe againſt them, that they could not enjoy the fruit of their enterpriſes. They durſt not cauſe themſelves to be interred in the pyramids erected by their orders: apprehenſive leſt the enraged people ſhould drag thence their carcaſes, and deprive them of ſepulture, theſe wretched ſovereigns were forced to recommend to their friends the care of depoſiting their bodies

[t] Diod. l. 1. p. 109.; Plut. t. 2. p. 380. A.

[u] De rep. l. 5. c. 11. t. 2. p. 407. E.

[x] L. 36. ſect. 16.

Theſe are the terms in which he expreſſes himſelf, ſpeaking of the pyramids. *Regum pecuniae otioſa ac ſtulta oſtentatio, quippe cum faciendi eas cauſa a pleriſque tradatur, ne pecuniam ſucceſſoribus, aut aemulis inſidiantibus praeberent, aut ne plebs eſſet otioſa.* Theſe firſt words, *regum pecuniae otioſa ac ſtulta oſtentatio*, have ſerved for a text to all our modern writers. This thought has appeared to them ſo fine and ſo juſt, that they have emulouſly commented and paraphraſed it, perpetually and ſervilely copying each other, as is their cuſtom, in almoſt all that concerns remote antiquity.

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in unknown and ſecret places [y]. Juſt puniſhment of thoſe exhorbitant taſks with which they had oppreſſed their ſubjects, and of the unheard-of labours they had exacted. Their very name has periſhed. The oblivion to which they were condemned [z], is without doubt the cauſe of our uncertainty at this day of the times and authors of theſe famous monuments.

After the pyramids, we may place, upon the credit of ancient authors, the labyrinth of Egypt in the rank of the moſt conſiderable and ſingular works which have ever been imagined. There reigns a great diverſity of opinions among the ancients upon the time to which that ſo boaſted edifice ought to be referred. I ſhall follow the opinion of Herodotus, who appears to me to deſerve the preference, as well for his antiquity, as by the exactneſs of his reſearches during his abode in Egypt. He places the conſtruction of the labyrinth under the twelve kings who reigned at the ſame time for fifteen years [a]. That event happened about 600 years before J. C. Pomp. Mela differs alſo very little from the relation of Herodotus [b]. It is then after theſe two authors, that I am going to trace a ſuccinct idea of the labyrinth of Egypt.

This edifice, according to Herodotus, who had viſited it very exactly, ſurpaſſed every thing that this great hiſtorian could have conceived either of himſelf or from others. Under one and the ſame circuit of walls they had incloſed 3000 halls, twelve of which were of a particular form and beauty [c]. All theſe apartments communicated with each other, but by ſo many turns and windings, that without a good guide it was impoſſible to avoid wandering [d]. Theſe 3000 halls or

[y] Diod l. 1. p. 73. 74. [z] Herod. l. 2. n. 128.

[a] L. 2, n. 148. [b] L. 1. c. 9.

This author attributes the conſtruction of the labyrinth to Pſammetichus, the laſt of theſe twelve kings. The ſilence of Homer on the labyrinth of Egypt ſerves further to confirm my opinion, and proves, that the conſtruction of this monument was poſterior to that great poet.

[c] L. 2, n. 148.

P. Mela ſays twelve palaces, a term which expreſſes the greatneſs and magnificence of the twelve halls of Herodotus.

[d] P. Mela *loco citat.*; Strabo, l. 17. p. 1165.; Plin. l. 36. ſect. 18. p. 739.

chambers

chambers were moreover diſtributed in ſuch a manner, that there were as many below ground as above. Herodotus aſſures us, that he viſited all the apartments above ground; but for thoſe that were ſubterraneous, they would not permit him to enter them from motives of ſuperſtition [e]. The whole building of the labyrinth, walls, and ceiling, were of white marble, and diſplayed a great profuſion of ſculpture [f]. Each of the twelve halls or galleries I have mentioned, were ſupported on columns of the ſame marble [g]. In fine, the labyrinth ended with a pyramid forty fathom high. Figures of animals were ingraved on it larger than the life [h]. There are now no remains of this ſo ſingular and ſo magnificent monument [i].

I think I have delivered every thing of conſequence tranſmitted to us by the ancients on the Egyptian monuments, and that, following the relation of modern travellers, I have given a ſufficient idea of what now remains of them [k]. Let us now allow ourſelves ſome reflections upon all theſe works. Let us examine the genius and taſte which characteriſed the enterpriſes of the Egyptians.

We cannot deny but that ſome ideas of grandeur entered into the projects of theſe people. They aimed, if the expreſſion may be allowed, to render their works immortal: this certainly is the end they appear to have propoſed. They forgot nothing which they imagined could contribute to enable their monuments to brave the injuries of time. The Egyptians ſought out all the arts which human power could furniſh to give ſtability to their edifices. They are as ſolid as immenſe; and in all appearance no wood entered into their conſtruction; at leaſt, none is to be ſeen in what remains at this day of the Egyptian monuments either entire or in ruins [l]. They are even compoſed, for the moſt part, of aſtoniſhing blocks of ſtone, marble, or granite; and cer-

[e] L. 2. n. 148. [f] Herod. ibid. [g] Ibid. [h] Ibid.
[i] See voyage into Egypt by Granger, p. 150. 151. 153.
[k] See part 2. book 2. c. 3. art. 1.
[l] Voyage into Egypt by Granger, p. 152. 153.; Paul. Lucas, third voyage, t. 3. p. 286.

tainly

tainly theſe people poſſeſſed an art of removing the moſt enormous maſſes with peculiar facility. This juſtice would be difficult to refuſe them, when we conſider the quantity of obeliſks, coloſſuſes, ſpires, and ſtones of prodigious bulk, which they raiſed to ſurpriſing heights *.

Such then, in general, is the character and reigning taſte of the monuments of Egypt. Huge and amazing piles indeed they are, and which we cannot ſee without a certain awe; but in vain do we look for grace, elegance, or ſymmetry. When we examine what may yet be found of the temples, palaces, and other edifices raiſed by the ancient Egyptians, the whole convinces us, that theſe people had no rules of proportion, no fixed and ſettled plan for their buildings. They worked, ſo to ſpeak, at random, and in a manner abſolutely vague and deſtitute of principles.

The Egyptians ſolely occupied with heaping maſſes upon maſſes, and raiſing ſtones upon ſtones, knew nothing of the reſources furniſhed by the arts of elegance. They ſought not to pleaſe, but to aſtoniſh the eye of the ſpectator. Hence they were for ever ignorant of beautiful proportion or advantageous diſpoſition. Their buildings are ſlovenly and diſagreeable in the groſs, and ſtill worſe in the detail. The Egyptian architects were abſolutely ignorant of the art of decorating an edifice. They had no idea of a juſt and ſuitable union of ſculpture and architecture, nor knew they how to diſtribute and place ornaments with propriety. They ſcattered them every where with profuſion, and a falſe and childiſh glitter is the reſult of the whole. Ignorance and barbarity are viſible in the whole œconomy of their edifices, even the moſt ſuperb. Columns, capitals, in a taſte the pooreſt, moſt ſordid and ſhocking. Entablatures of ſtupifying clumſineſs, ornaments of an execution

* Nevertheleſs we muſt agree, that in this reſpect the Peruvians ſurpaſſed the Egyptians. In the conſtruction of their edifices they made uſe of ſtones of a ſtill more aſtoniſhing bulk than thoſe which form the pyramids and other monuments of Egypt. Yet the Peruvians had no knowledge of mechanics properly ſo called. All they did was by main ſtrength and dint of numbers, and by means of terraſſes diſpoſed in the manner of inclined planes. Acoſta, hiſt. nat. des Ind. Occid. l. 6. c. 14.; Hiſt. des Incas, t. 1. p. 60. 61. 264. 265. 268.; Mem. de Trev. February 1750. p. 269.; Bouguer, voyage au Perou, p. 105.

and deſign inſupportably ridiculous. Truth inceſſantly tortured through the whole *. Theſe people, in fine, were entirely ignorant of the art of varying of figures. A monotony and uniformity as tireſome as ſhocking, reigns through all their compoſitions. No proportion moreover, no deſign, no meaning in the execution, all is equally ſpiritleſs and barbarous.

This eſtimate of the Egyptian architecture is beſides perfectly conformable to the judgment paſſed upon it by Strabo. This famous geographer, who had travelled through Egypt, aſſures us, that the edifices raiſed by the ancient inhabitants of that country diſplayed neither deſign, nor genius, nor elegance [m]. So we ſee, that their manner of building was followed neither by the Greeks, nor by the Romans. The Egyptian taſte in architecture has viſibly no manner of relation with that tranſmitted to us by Greece and Italy [n], which alone however deſerves to be followed either for elegance, or even for ſolidity †.

Let us add, that the Egyptians appear to have been entirely ignorant of the art of throwing an arch. We find no appearance, no indication of it in what now remains of their ancient buildings. We do not even find that they knew the art of cutting arch-wiſe the blocks of ſtone which form the heads of their doors. They are all uniformly terminated by a lintel abſolutely ſtraight and even [o]. It is the ſame thing with their roofs. I have ſaid above, that, according to all appearance, the Egyptians admitted no wood in the conſtruction of their buildings of conſequence, ſuch as temples, palaces &c. Large ſtones reſting at each end upon the walls of the halls ſerved for beams, and com-

* See Paul Lucas, third voyage, t. 3. p. 33.; Pococke, deſcript. of the Levant, t. 1.; Norden's travels into Egypt and Nubia, t. 2.

[m] L. 17. p. 1159. B. See alſo the relation of Sayd, in the collection of Thevenot, t. 2. p. 4.

[n] Athen. l. 5. c. 9. p. 206.; P. Lucas, third voyage, t. 3. p. 17. 39. 264.; Sicard, mem. des miſſ. du Levant, t. 2. p. 209.

† We may judge of the ſolidity which the Greeks and Romans knew how to give their buildings, by ſeeing after how many ages many edifices of Greece and Rome ſtill brave the injuries of time.

[o] See Pococke, voyage to the Levant, t. 1.; Norden, travels into Egypt and Nubia, t. 2.; and the other authors before cited.

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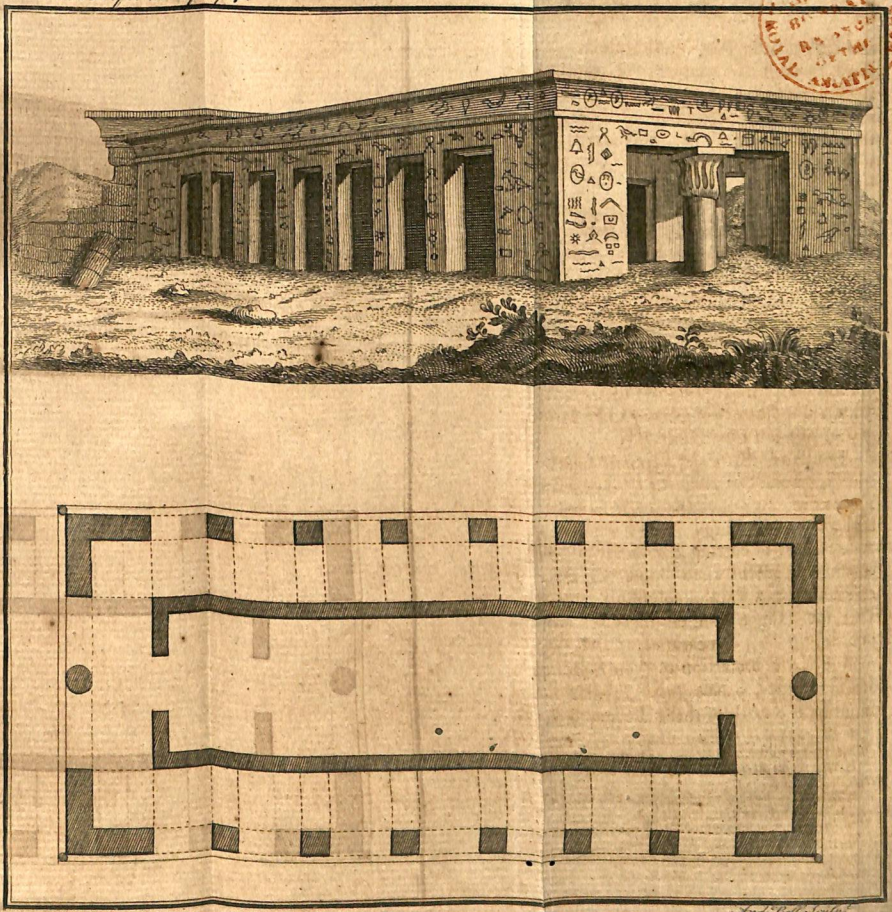

And.ª Bell Sculp.ª

Monuments drawn from upper Egypt which proves that the Egyptians did not know the Art of making Vaults.

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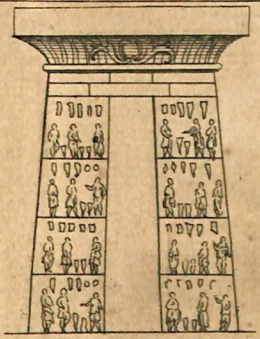
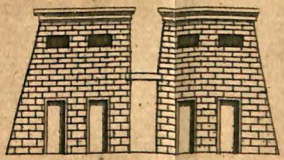
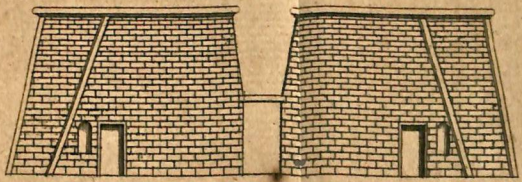
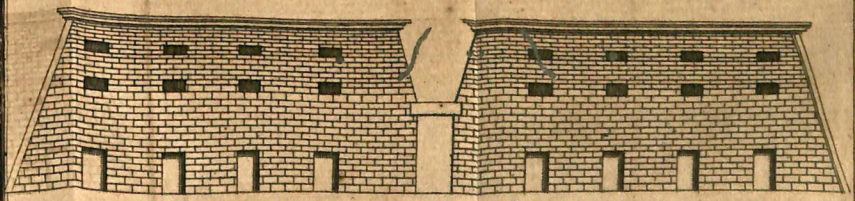


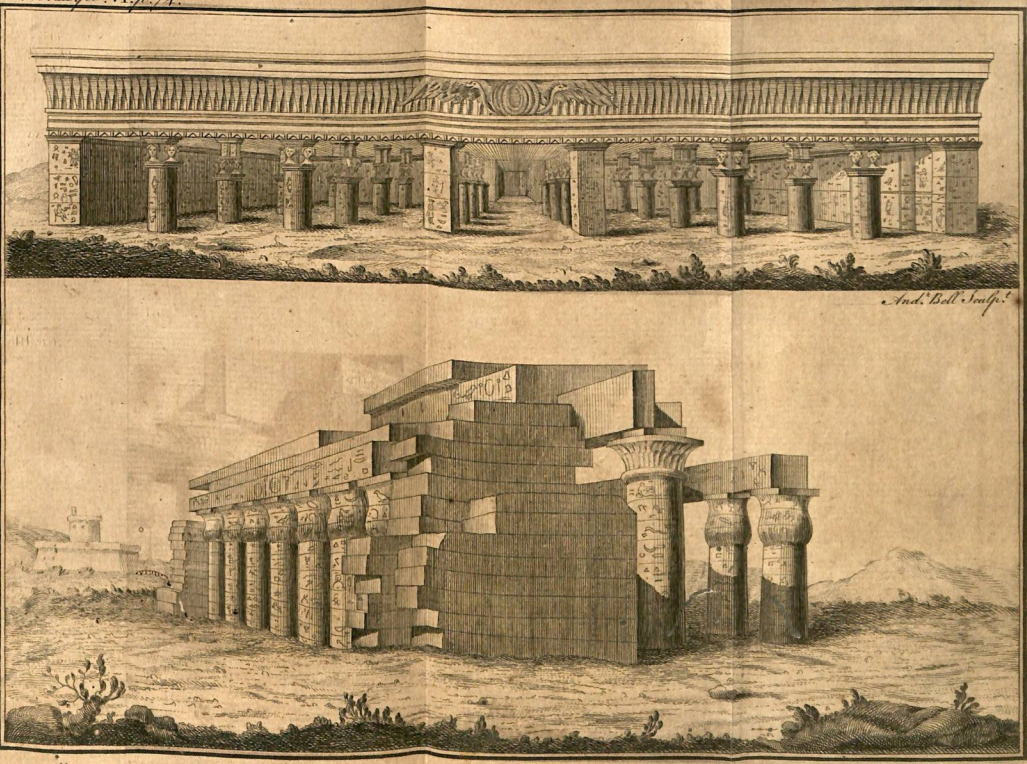






J.B.Sculpt

Monuments of Upper Egypt which show that the Egyptians did not know the Art of making Arches.



And. Bell Sculp.

Monuments which prove that the Egyptians knew nothing of the Art of making Vaults or Arches.

poſed the roofs [p]. But as in any conſiderable reach theſe ſtones might have given way, the Egyptians ſupported them by columns. And this we ſee was practiſed in all the grand edifices deſcribed by modern travellers [q]. Often even a ſingle ſtone formed the roof of a hall [r]. As to the reſt, we are not to believe that the deſire of rendering their edifices more durable and ſolid, was the only reaſon which led the Egyptians to build them without wood. The nature of the climate they inhabited, undoubtedly contributed a great deal to it. Egypt produced no wood for building. Scarce do we find any for fewel [s].

We ſhall not conceive a better idea of the progreſs of the Egyptians in the arts of taſte and elegance, if we caſt our eyes upon what yet remains of their ancient ſculptures. Their ſtatues and ingravings diſplay neither genius, nor talents, nor juſtneſs. They are equally awkward and incorrect. The figures in general are poor and flat, all of a ſize, without regard to perſpective, leſſening, ſtiff, without elegance or ingenuity, without ſtudy in the choice of the ſubject, without action, delicacy, or any ſort of expreſſion. The Egyptians, in a word, knew neither how to deſign ſimple figures nor to group their compoſitions. No meaning neither, nor variety in thoſe hideous aſſemblages preſented in their ingravings *. Let us remark alſo, that their figures are always drawn in profile, and never in full or a fourth inclined. In effect, bodies ſeen under theſe aſpects require too much addreſs, and ſkilfulneſs eſpecially, to have been ſucceſsfully repreſented by the Egyptians. And yet the

[p] See Greaves, pyramid. p. 16.; Thevenot, t. 2. p. 419.; P. Lucas, third voyage, t. 3. p. 38. 264. 265. 275.; Voyage to the Levant, t. 1. p. 42.

[q] P. Lucas, third voyage, t. 3. p. 38.; Sicard mem. des miſſ. du Levant, t. 7. p. 1[illegible].; Granger, voyage into Egypt, p. 38. 47. 68. 69. 73.

[r] Herod. l. 2. n. 155.; Diod. l. 1. p. 56.; Strabo, l. 17. p. 1165.

[s] Pietro della Valle, lett. 11. p. 210. 218.; Granger, voyage into Egypt, p. 13.; Paul Lucas, third voyage, t. 3. p. 211. 212.

* See the figures ingraved upon the obeliſks, and upon all the other monuments truly Egyptian. I ſpeak not here of the bas reliefs, for I have never ſeen any of them, and I even doubt whether the Egyptians were ever ſkilled in work of this kind.

heads, hands, and feet, for all the facility of executing them in profile, have in the Egyptian works neither motion nor expreſſion.

We have already ſeen that it was the ſame thing in the ornamental part of their architecture. It is all heavily laboured, without taſte and without preciſion. If the Greeks did learn from the Egyptians to handle the chiſel, they found means to make a much better uſe of it. Their monuments are as valuable for their grace and variety, their fire, their ſpirit, and the truth which animates them, as thoſe of the Egyptians are diſguſting by their deformity and heavineſs, their monotony and incorrectneſs. This contraſt did not eſcape the diſcernment of the ancients. We ſee that they made little account of the ſculpture of the Egyptians [t].

I have already ſpoken of the taſte this people had for coloſſuſes. We have ſeen, that, according to the relation of modern travellers, many of them ſtill ſubſiſt at this day in different places of Higher Egypt [u], without reckoning the ſphinx which is found at a little diſtance from the pyramids. We ſee little at preſent except the head of this figure, the reſt being buried in the ſand. This head is 35 feet round, and 26 high. They reckon 15 feet from the ear to the chin [x]. It is eaſy from theſe dimenſions to judge of the whole bulk of this enormous ſtatue. When I am upon this ſubject, it may be expected I ſhould ſay ſomething of the manner the Egyptians went about in making their coloſſuſes. A paſſage of Diodorus lets us into it.

This author ſays, that the Egyptian ſculptors were ac-

[t] Strabo, l. 17. p. 1159.; Pauſ. l. 7. c. 5.

[u] See part 2. book 2. ſect. 1. c. 5.

[x] Maillet, p. 221.; Theven. t. 2. p. 426. Pliny, l. 36. ſect. 17. exaggerates prodigiouſly the proportions of the ſphinx in queſtion: he ſays, that if we meaſure the circumference of the head by the forehead, we ſhall find it 102 feet in compaſs, and 143 in height. Paul Lucas gives the head of the ſphinx 100 feet in compaſs, and about 70 from the chin to the top of the forehead. He thought without doubt that he ought to copy Pliny. Voyage to the Levant, t. 1. p. 46.

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cuſtomed to work at a ſtatue by ſeparate pieces. To execute this ſort of works, they divided the human body into twenty-one parts and one quarter, reſpectively meaſured and proportioned to each other. When they agreed upon the height of the figure they were about to form, every workman performed in his own ſhop the particular part he was charged with. Although all theſe different pieces had been ſeparately executed, yet they were put together and agreed with the utmoſt exactneſs [y]. Such is the relation of Diodorus; it demands ſome reflections.

This practice of the Egyptian ſculptors, of working a ſtatue by ſeparate pieces, is not likely to have been a general practice, though Diodorus mentions it as ſuch. I am perſuaded, that ſtatues of a natural ſize were probably of one piece, and done by the hand of a ſingle artiſt. It is not the ſame with reſpect to the coloſſuſes, which were ordinarily compoſed of ſeveral blocks of marble. In this caſe the practice Diodorus ſpeaks of muſt have been very ſerviceable, and much in uſe for the readineſs of the execution. Something like this I imagine to have been nearly the way they went about it. They began by making a model of plaiſter, or clay, as is practiſed at this day by our modern ſculptors. They then cut this model into ſeveral pieces. Every workman took away the part that was allotted him, and worked after that pattern. In this manner we conceive how many artiſts might ſeparately execute one and the ſame coloſſus.

I think I have ſufficiently proved in the preceding books, that painting was not known till the epocha which is treated of in this third part [z]. The invention of it ought to be referred to the ages we are now going through. It is not poſſible to fix the date of it with exactneſs; only we ſee that it muſt have been held in honour, at or before the time of Candaules King of Lydia. Pliny ſays in effect, that this prince, whoſe reign falls about the year 720 before Jeſus Chriſt, bought at its weight in gold a picture repreſent-

[y] Diod. l. 1. p. 110. [z] See part 2. book 2. ſect. 1. c. 5.

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ing a battle [a]. Herodotus tells us alſo, that Amaſis, who reigned in Egypt 570 years before the Chriſtian æra, had made a preſent of his portraiture to the inhabitants of Cyrene [b]. Painting then was known in Egypt in the ages on which we are at preſent employed.

I do not think theſe people ſucceeded any better in this art than in ſculpture. There is even no room to doubt it, conſidering the intimate connection there is between painting and ſculpture. Neither is there mentioned in antiquity any Egyptian painter or ſculptor famous for his works. One ſingle point in which the painters of that nation appear to have excelled, is a certain preparation they made uſe of for fixing colours upon marble and other bodies ſmooth and of cloſe pores. They muſt have employed a very ſtrong and powerful corroſive, as appears by what our travellers tell us. They aſſure us, that in many edifices half in ruins there are ſtill paintings to be ſeen whoſe gloſs and colouring are ſo lively, ſo freſh and ſo bright, that it ſeems, ſay the inhabitants of the country, as if the artiſt had not yet waſhed his hands after his work [c]. But theſe ſame travellers generally agree, that all theſe paintings are flat, that is to ſay, without any riſe or oppoſition of colours. Leaves of gold or ſilver, for example, mingled with colours red and blue. The reſult is, that in all theſe compoſitions the figures in general cut upon the ground, and ſevered from it by ſharp lines; the tints appearing neither ſoftened nor ſhaded off.

From all that has been ſaid we may conclude, that the Egyptians made no progreſs in the arts of taſte and elegance. For, as I have already premiſed, the ages which cloſe this third and laſt part of our work, ought to be regarded as the epocha which cloſes alſo the ancient hiſtory of Egypt. From the deluge to the time of Cyrus is the ſpace to which we ought to confine that national genius which has never

[a] L. 35. ſect. 34. p. 690. [b] L. 2. n. 182.

[c] Relat. du Sayd apud Thevenot, t. 2. part 3. p. 4.; Sicard, mem. des miſſ. du Levant, t. 2. p. 209. 211. 221. t. 7. p. 37. 160. 163.; P. Lucas, voyage to the Levant, t. 1. p. 99. 106.; Granger, p. 46. 47. & 73.

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mined the character of the Egyptians properly ſo called. We have therefore exhauſted all the facts and all the monuments which can be ſaid to belong really to this people, and are conſequently enabled to paſs our judgment upon their taſte, and upon their manner of treating the arts.

What I have ſaid of the Egyptians, regards equally the Aſſyrians and the Chaldeans. From the time of Cyrus they ceaſed to be a diſtinct nation, and becoming ſucceſſively a prey to the Perſians, Greeks, and many other conquerors, they were inſenſibly loſt and confounded with the victors. The reflections I am about to propoſe belong then equally to the Aſſyrians, Babylonians, and Egyptians. We may ſee under one and the ſame point of view, the genius and character of theſe different nations. Their hiſtory begins and ends nearly at the ſame time. Their glory and their knowledge were nearly equal, and the power and duration of their monarchy little different.

The hiſtory of the arts preſents us amongſt theſe nations with a very ſingular contraſt. We perceive in it very early diſcoveries of conſiderable importance. Almoſt from the firſt ages we ſee them make a progreſs whoſe rapidity aſtoniſhes and ſurpriſes us. But theſe once paſſed we can obſerve no further advances. Things remain always in the ſame ſtate with theſe people. The Aſiatics and Egyptians appear to have made no advantage of the duration of their empires, to acquire new lights, or to bring their firſt diſcoveries to perfection. Their faculties ſeem to have been bound up and limited to a certain number of ideas, and to a degree of knowledge acquired in the earlieſt times, beyond which theſe nations never aſpired. Very different from the European nations, whom we ſee inceſſantly improving their knowledge, and daily aiming at new inventions, the Egyptians and Aſiatics remained almoſt at the ſame point from whence they ſet out. How comes it that theſe people did not continue to extend and perfect their diſcoveries; and why did they advance no further in the career of the arts, and even in that of the ſciences? I think I have found in their turn of mind, and

in the principles of their government, the obſtacles which retarded their progreſs.

In all times the Egyptians [d] and Aſiatics were little communicative, treating foreign nations with ſovereign contempt, and never deigning to maintain any commerce or connection with any of them. They remained always confined to their own country, and never travelled. One of the principles of their government was to admit no novelty, and ſcrupulouſly to follow what had been practiſed by their anceſtors [e]. Let us add to theſe maxims, which alone muſt have brought an eternal obſtacle to the advancement and perfection of human attainments, the falſe policy which had rendered profeſſions hereditary in the ſame families [f]. We have ſeen in the preceding book, what an injury ſuch an inſtitution muſt have been to the arts, and even to the ſciences [g]. The claſs of artiſans was moreover the laſt of all the claſſes, and all who compoſed it were held in ſovereign contempt [h]; a treatment they ſtill meet with over all the eaſt [i]. Theſe facts being admitted, we eaſily perceive, that there could reign no ſpirit of emulation amongſt the Aſſyrians, the Babylonians, or Egyptians; every ſentiment of induſtry and fame was neceſſarily ſtifled. We may even go ſo far as to believe that the condition of working men was no better amongſt theſe people, than it is at this preſent in the country of the Mogul, where they are made to work with whips, and by force of menaces and ill uſage [k]. Let us not wonder then at the little progreſs of the Aſiatics and Egyptians in the arts. Take away emulation, and that noble ambition which alone can elevate the ſoul and animate the genius, immediately all droops, and is confined to a narrow circle of endleſs mechanical repetitions.

[d] See part 1. book 4. chap. 2. and part 2. book 4. chap. 1.
[e] See Plato de leg. l. 2. p. 789.
[f] See Diod. l. 2. p. 142. *et ſupra*, l. 1. c. 4. p. 26.
[g] Chap. 4. p. 20. and following.
[h] Herod. l. 2. n. 167.; Diod. l. 1. p. 85. 86.
[i] See *ſupra*, book 1. c. 4. p. 23. & 24.
[k] Voyage of Bernier, t. 1. p. 304. 305. It is the ſame thing in China.

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It was not thus with the Greeks. A ſkilful painter, architect, or ſculptor, enjoyed the higheſt conſideration, and the moſt flattering diſtinctions. Poſterity celebrated their names in feſtivals. A city valued itſelf as much upon having produced a citizen famous for ſome talent, as for having given birth to a politician, a philoſopher, or a general of the firſt merit. It is to this manner of thinking and of acting that Greece owes the pre-eminence and ſuperiority in many branches of the arts, which it will perhaps always enjoy: and to convince ourſelves of this, let us compare the productions of the Aſiatics and Egyptians with thoſe of the Greeks. Aſia and Egypt preſent us with edifices immenſe and prodigious indeed; but that is all their merit. To characteriſe them rightly, they are nothing but enormous piles, without ſkill or ingenuity, the works of patience and of bad taſte. In the monuments of Greece, on the contrary, all is lively and animated, elevating the ſoul, and ſpirited throughout. Grace, and fire, and genius, and the moſt exquiſite expreſſion, are diſplayed on all their parts.

Let me be indulged one reflection more on the monuments of ancient Egypt. Some are pleaſed to extol them, and even to pronounce without heſitation, that there is nothing amongſt us worthy to be compared to them: agreed, if heaps of ſtones only are meant, enormous piles, without taſte and without genius, ſuch as the pyramids, obeliſks, and coloſſuſes, and in general all the pretended marvels of ancient Egypt; I am ready to own, that, in this reſpect, France has nothing like them to offer. But will any one compare thoſe miſ-ſhapen monuments, whoſe diſtance is certainly their greateſt merit, with that quantity and that variety of buildings of every kind which meet our eyes in every part of the kingdom? We are ſo accuſtomed to the daily ſight of theſe maſterpieces of art, that we do not give that attention to them which is neceſſary to make us ſenſible of their value. Yet if we would reflect upon them, we ſhould very ſoon judge what a ſuperiority we have over the Egyptians, and how greatly our monu-

ments, taking them for all in all, have the advantage of thoſe of theſe ancient nations *. I ſpeak of the royal palaces, Verſailles, the Tuileries, the Louvre, the Hotel des Invalides, Marly, the Obſervatory, &c. Let us add to theſe, ſome buildings in Paris, ſuch as the bridges Pont Royal and Tournelle, and above all that aſtoniſhing range of quays which lines the Seine on each ſide. If we would eſtimate the time, the money, and the labour expended on all theſe different works, equally immenſe and magnificent, we ſhall very ſoon be ſenſible how greatly France excels all that Egypt ever produced. I might alſo mention that aſtoniſhing number of places fortified by M. de Vauban, the port of Dunkirk, that of Breſt, Rochefort, Toulon, &c. I might alſo cite the canal of Languedoc †, and in general, the great roads of the kingdom: theſe works are greatly ſuperior to all thoſe of ancient Egypt. Infinitely more money has been expended, and much more genius was requiſite, as well as more power, taſte, and time to finiſh Verſailles with all its defects, than to conſtruct a pyramid, or hew out an obeliſk. Let us remember nevertheleſs, that Verſailles, and all the works I have here enumerated, were executed in the reign of one monarch.

* However extravagant and exceſſive were the prepoſſeſſion and admiration of the Greeks for Egypt, there are, notwithſtanding, writers among them who paſſed the ſame judgment on the Egyptian monuments compared to thoſe of Greece. See Pauſ. l. 9. c. 36. p. 783.; the Emperor Julian in his 68th letter apud Fabric. biblioth. Gr. t. 7. p. 84.; Strabo. l. 17. p. 1159.

† The canal of Languedoc, from its entrance in the port of Cette to Toulouſe, is more than 70 leagues in length, and 30 feet in breadth. They were often obliged to make angles, and wind it round the mountains, to preſerve the level; to fix it upon piles in boggy grounds, to ſuſtain it upon bridges or ſtone arches in the valleys, to hew down or lower certain mountains, in fine, to pierce through others, and vault them to receive this canal. They dug out above two millions of cubic fathoms of earth, and more than five thouſand of rock. One hundred and fourteen ſluices were conſtructed for barks to go up or down; ſixteen enormous dykes to repel the torrent; twenty-four drains to let off the waters of the canal when it is in danger of filling up with mud or ſand. In this work are reckoned upwards of forty thouſand cubic fathoms of maſon-work; to which are to be added the piers of two hundred fathoms, and the mole of five hundred, which cover the harbour of Cette, and make it a ſecure aſylum for ſhips.

CHAP.

CHAP. III.

Of the Greeks.

FRom the Trojan war till the year 590 before J. C. that is, till the time of Solon and Piſiſtratus, we are but little acquainted with the minuter affairs of the Greeks. Hiſtory, however, in this ſame interval, furniſhes many reſources and lights concerning the ſtate of the arts amongſt theſe people at that time. When we are upon this ſubject, it is eſſential, that we diſtinguiſh the Greeks of Europe, from the Greeks ſettled in Aſia Minor. The arts attained but ſlowly enough a certain degree of perfection in Greece properly ſo called. Their progreſs was much quicker, and much more rapid, in the colonies which ſome time after the Trojan war were ſent from Greece to ſettle in Aſia Minor [a]. In theſe happy countries aroſe the firſt productions which have rendered the Greeks famous to poſterity. I have elſewhere ſhown the reaſons why theſe firſt ſparks of genius muſt have ſhone in Aſiatic ſooner than in European Greece [b], and ſhall not dwell upon it here. I paſs on to the hiſtory of the arts as diſplayed in the ages which are the ſubject of this third part of our work.

It is in the colonies of Aſia Minor that architecture began to form itſelf. The invention of the two firſt orders which the Greeks made uſe of, is entirely owing to the inhabitants of theſe countries. Their name ſufficiently evinces it. The Doric owes its original to the Dorians, and the Ionic to the Ionians. The Corinthian did not appear till long after theſe two firſt orders. This laſt ſeems to have been invented in Greece, properly ſo called. It is the richeſt, the moſt magnificent, and the moſt elegant of all the Grecian orders, and perhaps of all that architecture ever invented.

[a] See ſupra, book 1. c. 5. art. 3.
[b] Part 2. book 3. art. 3. c. 3. § 3.

I have already had occaſion to mention the manner that Vitruvius relates the origin of theſe orders; and I have ſaid, that his relation had no ſort of probability. It ſatisfies us not, and inſtructs us ſtill leſs[c]. It were much better to own that we are ignorant how, or at what preciſe time theſe orders of architecture were invented. All I pretend to affirm, is, that they were known and practiſed in the ages we are now employed on. The ſuperb temple of Jupiter at Olympia exiſted in theſe times[d]. They had alſo begun that of Diana at Epheſus[e]. In fine, Piſiſtratus had laid at Athens the foundations of a magnificent temple of Jupiter Olympius[f], without ſpeaking of many other edifices which we may ſee enumerated in authors who treat particularly of architecture.

One fact, however, which I muſt not paſs over in ſilence, is, that mechanics muſt have been as yet very imperfect amongſt the Greeks. We ſee, that, even in the time of Thucydides, they were not acquainted with the crane. Their workmen ſupplied the want of this machine, ſo ſimple, but ſo uſeful, by ſquare beams[g]. The action of which was probably like that of a ſwipe. This fact cannot give us a great idea of the machines which the Greeks employed in the conſtruction of their buildings.

To enter here into ſome detail upon the taſte which then reigned in their architecture: I ſhall remark at firſt, that they employed only one order in the conſtruction of all the monuments I have juſt mentioned. The cuſtom of mingling and uniting many of them in the ſame edifice, did not take place amongſt the Greeks till pretty late. I ſhall next ob-

[c] See part 2. book 2. ſect. 2. c. 3.

[d] See Pauſ. l. 5. c. 10. This building, according to the calculation of Pauſanias, muſt have been erected about the year 630 before J. C.

[e] Tit. Liv. l. 1. n. 45. places this event under the reign of Servius Tullius the 6th king of Rome; that is, about the year 560 before J. C. This is alſo nearly the calculation of Diog. Laert. l. 2. ſegm. 103. This author ſays, that Theodorus of Samos had adviſed to lay the foundations of the temple of Epheſus upon beds of coal. This Theodorus, by the account of Herod. l. 3. n. 41. of Ariſtotle de rep. l. 5. c. 11. and of Pauſanias, l. 8. c. 14. flouriſhed in the time of Polycrates tyrant of Samos, whom we know to have been cotemporary with Amaſis, who mounted the throne of Egypt the year 569 before J. C.

[f] Vitruv. l. 7. præfat. [g] L. 4. p. 327.

ſerve,

ſerve, that, for a long time, theſe people employed only the Doric and Ionic orders. The temple of Epheſus and that of Jupiter at Olympia, which we may place in the number of the moſt ancient monuments that enlightened Greece ever elevated, were, one of the Ionic [h], and the other of the Doric order [i]. The famous temple of Minerva at Athens, built under Pericles, and that of Theſeus, are alſo of the Doric order [k]. In fine, we ſee, that of the four moſt famous temples in which Greece, in the judgment of Vitruvius, could glory, the two moſt ancient were of the Ionic order, the third of the Doric, and the fourth of the Corinthian. But let us remark, that this laſt edifice, according to the ſame author, was not built till the time of the Romans [l]. In effect, it is very rare to ſee the Corinthian order employed in the famous edifices of antiquity. The little uſe the Greeks made of it would lead me to think, that their architects did not think that order ſufficiently grand and majeſtic.

Let us add, that in all that remains of the fineſt works of antiquity, Greek and Roman, built in the Doric order, the columns are without a baſe *. Vitruvius conformed himſelf to this practice. This architect, who appears to have applied himſelf to treat of this order more exactly than of any other, ſays nothing of the baſes of the columns, and yet he enters into many details upon thoſe of the other orders. Be it alſo obſerved, that the orders of the Grecian architecture were neither invented nor executed in the early times, ſuch as we ſee them at this day in the ruins of ancient Rome, nor with the ſame ornaments that our architects employ in them. Many changes and augmentations have been ſucceſſively made. Amongſt the Greeks architecture was but little

[h] Vitruv. l. 7. praefat. [i] Pauſan. l. 5. c. 10.
[k] Voyage de Spon, t. 2. p. 420. 455. [l] Vitruv. l. 7. praefat.

* As in the theatre of Marcellus at Rome, that of Vicenza, and in a moſt magnificent triumphal arch which is at Verona. We may ſee ſome profiles of Doric columns without baſes in M. de Chambray, p. 15. 19. & 33. particularly where he has laid down the deſign of an antique mauſoleum which is to be ſeen near to Terracina. The columns of that edifice, which is of the Doric order, have no baſe. It is the ſame in a temple of Bacchus, built at Sardis in the reign of Croeſus. The columns of this monument, of which we ſtill ſee the ruins, have no baſe. See alſo the notes of Perrault upon Vitruv. p. 176. n. [b] at the end.

charged

charged with ornament. The adventitious parts of their works were founded in nature. Conſequently they did not in their repreſentations think themſelves at liberty to recede from truth in ornamental repreſentation. In a word, theſe great maſters admitted nothing but what they could juſtify and explain by ſolid, or, at leaſt, by probable reaſons. On theſe principles, the ancients had regulated the proportions of each of the orders they have left us [m].

We are not however to condemn alike all the changes that have been made in the ancient architecture. Some of them are advantageous. The moderns have endeavoured to correct what appeared defective in the firſt models. The baſes called Ionic, the only ones in uſe amongſt the ancients, have been judged not very convenient. The capital of the ſame order has been found incommodious and diſagreeable. It has therefore been changed. The unanimous agreement of all architects to receive and adopt theſe innovations, does not permit us to doubt of their being juſt and reaſonable *.

The Greeks, moreover, reſerved all the pomp and beauties of their architecture for their temples, theatres, and other public edifices. They employed them not in the houſes of private people. Their dwelling-houſes had infinitely leſs of beauty, of grandeur and magnificence, than ours. There was not a ſingle palace, that is to ſay, a private building, worthy of that name in all Greece. This may be attributed to that republican ſpirit which reigned in all the ſtates of that part of Europe. Exterior modeſty is the appendage and favourite virtue of republics. However rich and powerful a citizen might be, he would not dare to offend the eyes of his countrymen by pompous buildings, whoſe luſtre would have offended them, and infallibly expoſed their owner to the public envy and jealouſy. Let us now ſay a word on ſculpture and painting.

[m] Vitruv. l. 4. c. 2.

* See the preface of Perrault upon the diſtribution of the five kinds of columns according to the method of the ancients, p. 24. and following, and part 2. c. 3. p. 62.

We

We find that ſculpture and painting began alſo to diſplay themſelves in Greece towards the end of the ages we are now going through. Some ſculptors had already acquired a ſhining reputation about the time of the 50th Olympiad, that is to ſay, about the year 576 before J. C. Dipœnus and Scyllis became at that time extremely celebrated for inventing the ſculpture and poliſhing of marble [n]. They formed many pupils whoſe works were greatly eſteemed. Sculpture however did not attain that character of purity, elegance, and that degree of ſublimity to which the Greeks carried it, till the time of Pericles, that is, more than 150 years after the artiſts I have been ſpeaking of.

As to painting, it was ſtill longer of being brought to perfection. This art, the invention of which I ſhould readily give to the Greeks, did not appear in all its luſtre till under the reign of Alexander. I am not at all ſurpriſed at it. What time and ſtudy, what diligence and thought muſt it not have coſt to bring painting to any kind of perfection! And this art, as I think I have ſhown, did not begin to exiſt till the time of Homer [o]. Accordingly, in the ages which employ us at preſent, the painters were ſtill very ignorant. We ſee at once, that for a very long time they knew nothing of the art of mingling of colours. The firſt pictures that appeared were painted with only one ſingle colour, which muſt have been both very harſh and very dry, ſince it was nothing but a water-colour made of pieces of pottery ground and finely powdered [p]. This ſort of painting may be thought to have reſembled that which is now known to us by the name of *Brooch* * (*Camayeu*). But there is no appearance of it. The Greeks were at that time too unſkilful to have underſtood that way of painting, which conſiſts in ſoftening the ſhades of one and the ſame colour. Let us judge of their ſkill by one fact which is warranted by many

[n] Plin. l. 36. ſect. 4.
The moſt ancient inſcriptions of Peloponneſus and Attica are ingraved on marble, abſolutely rough and unpoliſhed.
[o] See part 2. book 2. ſect. 1. c. 5. art. 3. [p] Plin l. 35. ſect. 5.
* The monochromaton of the ancients. See Pliny, book 35. ſect. 8.

very

very celebrated writers of antiquity. They tell us, that pictures were in the beginning ſuch wretched imitations, that they were obliged to write under them the names of the objects they were deſigned to repreſent [q]. It was only towards the time of Miltiades, that is, about 450 years before J. C. that the Greeks began to be able to catch a reſemblance of the perſons they deſigned to repreſent [r]. In fine, Pliny remarks, that before Apollodorus, who lived in the 93d Olympiad (410 years before J. C.), there was no picture that could attract or retain the attention of the ſpectator [s].

We find moreover, that in the ages here in queſtion, many workmen became famous in Greece by their ſkill in working metals, and particularly iron [t]. To conclude, if we were to go upon a longer examination, and make more circumſtantial reſearches, it were eaſy to ſhow, that the epocha which is the object of this third part of our work, is that to which we ought to refer the unfolding of all the ſublime diſcoveries with which the Greeks enriched the arts in after ages. But

[q] Ariſt. topic. l. 6. c. 2. t. 1. p. 243; Ælian. var. hiſt. l. 10. c. 10., Plin. l. 35. ſect. 5.

[r] The paſſages of Ariſtotle and of Ælian which I cite, are very clear and preciſe. We cannot ſay the ſame of that of Pliny. His phraſe is dubious, as is uſual with that author, who affects to ſhine. It has even been attempted to give this paſſage a ſenſe totally contrary to that which I have imagined the true one. They will make Pliny ſay, that the portraits painted by the artiſts of whom he ſpeaks were ſo like, that to make known to poſterity the perſonages they repreſented, they wrote their names at the bottom of thoſe pictures, as we now do at the bottom of portraits on copper-plates. But this explication does not appear to me to hit the meaning of Pliny. It were eaſy to cite in my favour the ſuffrage of all the interpreters and commentators of this ancient writer. They have all underſtood the paſſage in queſtion in the ſenſe I give it. However, without having recourſe to authorities which may often appear doubtful, I think, that upon this occaſion we ought to interpret Pliny by Ariſtotle and by Ælian. This principle eſtabliſhed, the paſſage of that author confirms the fact which I have advanced upon the ignorance and unſkilfulneſs of the firſt painters. I ſhall agree at the ſame time, that this explication ſeems in ſome ſort to put Pliny in contradiction with himſelf. But it may be anſwered, that this is not the only example which is to be found of that in his writings. It is moreover the defect of all authors who have affected to ſpeak in ſentences and enigmas.

[s] Plin. l. 35. ſect. 34. [t] Ibid. ſect. 36.

[q] Herod. l. 1. n. 25.; Pauſ. l. 5. c. 12. p. 161. l. 10. c. 16.

I leave theſe details, which, as they again and again preſent objects nearly alike, might in the end fatigue the reader.

Let us remark nevertheleſs, that theſe ſame people, whom we cannot too much applaud for their genius in architecture, in ſculpture, and perhaps alſo in painting, were very little induſtrious in procuring themſelves many conveniencies, which at this day it appears impoſſible to do without. For example, the cloathing of the Greeks was always very defective. I have ſaid elſewhere, that they were neither acquainted with the uſe of linen, nor ſhoes, nor ſtockings, nor breeches. Their coats had neither buttons nor button-holes. We ſhall ſee alſo that theſe ſame people neither knew the uſe of ſtirrups to mount, nor of ſaddles to keep themſelves on horſeback *. I ſhall obſerve further, that in their houſes they wanted many of the moſt uſeful and agreeable inventions. They had neither glaſs windows nor chimneys. Theſe people were alſo ignorant of the art of lighting themſelves by the uſe of wax or tallow. I might, if it were neceſſary, make a longer enumeration of arts unknown to the Greeks. I ſhould then ſpeak of printing, of fire-arms, of the mariners compaſs, of chymical fluxes, of ingravings in copper-plate, of mirrors, of teleſcopes, of clock-work, of wind and water mills, &c.; inventions which theſe people never knew. But what I have juſt ſaid is, I think, ſufficient to prove how great, in many reſpects, was the imperfection and ignorance of the arts among the Greeks.

* See *infra*, book 5. chap. 2.

BOOK III.

Of Sciences.

WE are arrived at the ages which cloſe and terminate our reſearches on the ſtate of the ſciences amongſt the ancient nations. The epocha of Cyrus is, in effect, that of the fall of the empires of Aſſyria, of Babylon, and even of the monarchy of the firſt Egyptians. We can therefore judge of all the diſcoveries which we ought properly to attribute to the Aſſyrians, the Babylonians, and the Egyptians. Thoſe made amongſt theſe nations poſterior to the ages which cloſe this third part of our work, can belong to them but imperfectly. It was no longer the ſame Aſſyrians, the ſame Babylonians, nor the ſame Egyptians, whoſe ſtate we have hitherto conſidered. Their empire was deſtroyed, and their primitive genius changed by the mixture of other nations, to whom, after the time of Cyrus, theſe people continued always ſubject.

We ſhall not find it the ſame with the Greeks as with the Aſiatics and Egyptians in the ages we are at preſent employed upon. On the contrary, we ſhall but juſt perceive the opening bud of all thoſe inventions which have ſecured to that nation the diſtinguiſhed rank which they have and will for ever poſſeſs. The epocha we are now going through, ought, however, to be regarded as one of the moſt conſiderable of the Grecian hiſtory. It was towards the end of the ages it takes in, that letters and philoſophy began to take deep root in Greeee, to ſtretch up with a rapid growth, and very ſoon becoming fruitful, they produced thoſe immortal fruits with which the univerſe entire has, and yet continues every day to enrich itſelf.

CHAP.

CHAP. I.

Of Medicine.

BY the conſent of all antiquity, it is allowed that the hiſtory of medicine remained involved in the darkeſt clouds from the Trojan war to that of Peloponneſus [a]. We cannot however, ſuppoſe that the ſtudy of a ſcience ſo neceſſary as that of medicine, ſhould, during ſo long an interval, have been abſolutely neglected. The ſacred books atteſt the contrary. Solomon muſt have poſſeſſed a great part of the various knowledge which conſtitutes the art of healing. The ſcripture ſays of this prince, that he had compoſed treatiſes upon all animals, birds, and fiſhes, and that he had wrote upon all plants, from the cedar of Lebanon to the hyſſop [b]. Many other facts related in the ſacred books atteſt equally the knowledge and the uſage of medicine in the ages we are at preſent employed upon.

We ſee, that there were in theſe times phyſicians by profeſſion among the Hebrews. Aſa, king of Judah being attacked by the gout, is reproached for that "he ſought not "to the Lord, but to phyſicians [c]." Hezekiah, threatened with death from an abſceſs, is cured by the application of a cataplaſm of figs [d]. Joram king of Judah, wounded in a battle, retires to Jezreel to be healed [e]. We gather alſo from many expreſſions of the prophets, that they then knew how to cure wounds, fractures, and bruiſes, by means of certain medicaments, ſuch as roſin, balſam, oils, and the

[a] Celſus, l. 1. in præfat.; Plin. l. 29. ſect. 2. p. 493.; Iſidor. orig. l. 4. c. 3.

[b] 1 Kings c. 4. v. 33. With the other knowledge that Solomon attributes to himſelf in the book of Wiſdom, he places the diverſities of plants and the virtues of roots, c. 7. v. 20.

[c] 1 Kings c. 15. v. 23; 2 Chronic. c. 16. v. 12.

[d] 2 Kings c. 20. v. 7.; Iſaiah c. 38. v. 21.

[e] 2 Kings c. 8. v. 29. c. 9 v. 15.

fat of animals[f]. It even appears that phyſicians were held in great eſteem amongſt the Aſiatic nations. "Honour a "phyſician," ſays the Eccleſiaſticus, "for the uſes which "you may have of him[g]."

As to the Greeks, although we are ignorant of the ſtate and progreſs of medicine amongſt theſe people from the Trojan war to that of Peloponneſus, yet it is certain, that the Aſclepiades, that is to ſay, the deſcendents of Æſculapius, preſerved that ſcience in their family without any interruption. They reckon three celebrated ſchools eſtabliſhed by them, one at Rhodes, another at Cos, and the laſt at Cnidos. Herodotus, who was anterior to Hippocrates *, ſpeaks alſo of many other very famous ſchools of medicine. Let us add that of Italy, which owed its riſe to Pythagoras, and whoſe erection we cannot place later than the year 550 before J. C.[h].

The poems of Homer furniſh ſtill plainer proofs of the ſtate of medicine, and of the progreſs it muſt have made, at the time in which this great poet lived. We find in his writings abundance of anatomical details. Homer gives a nominal deſcription of almoſt all the parts of the human body; more than that, this poet muſt have had a great knowledge of their ſtructure and of their functions, to judge of it by his deſcription of wounds, and the accidents reſulting from them. We might even reproach him with having in this reſpect affected to make a parade of his ſkill. However this may be, theſe facts do not permit us to call in queſtion the great inſight which in his time they had acquired in medicine. Nevertheleſs one reflection ariſes, which, at the firſt glance, ſhould ſeem to make this anatomical knowledge ſo remarkable in the writings of Homer, difficult to be conceived.

If we may believe an ancient commentator on Plato, Alcmeon, a diſciple of Pythagoras, paſſed for the firſt who

[f] See Iſaiah c. 1: v. 6.; Jerem. c. 8. v. 22.; Ezek. c. 30. v. 21.

[g] C. 38. v. 1.

* This great phyſician flouriſhed in the time of the Peloponneſian war, about the year 430 before J. C.

[h] See Le Clerc, hiſt. of medicine, part 1. book 2. c. 1. & 2.

had

had anatomized animals [i]. Ariſtotle, whoſe time was not till more than eighty years after Hippocrates, tells us, beſides, that in his days the Greeks had not yet dared to diſſect the human carcaſe. When this philoſopher ſpeaks of the internal parts of man, he ſays, they are greatly unknown, that we have nothing certain on their ſtructure and arrangement, and that we muſt judge of them from the reſemblance they ſhould have to the parts of other animals which may have ſome conformity with each of them [k]. How then is it poſſible, that, in the age of Homer, anatomy ſhould have been carried to a ſort of accuracy and exactneſs?

This objection which at firſt we might judge very ſtrong, ceaſes nevertheleſs to appear ſo, when we reflect on the various means which men have always had to inſtruct themſelves in the frame of the human body. I have explained theſe means in the firſt part of this work [l]. We may alſo conſult, on this ſubject, what Daniel Le Clerc ſays in his hiſtory of medicine. There this learned man makes us eaſily conceive, how the ancient phyſicians may have acquired a knowledge of the internal parts of the human body, without having been, for all that, in the habitual practice of diſſection [m].

I am, beſides, apt to believe, that the people of Aſia had not the ſame ſcruple as the Greeks about opening of human carcaſes. Homer may therefore have drawn from them that anatomical ſkill which he has diſplayed in his works. For though we cannot preciſely determine the country of this prince of poets, it however appears to me beyond a doubt, that he was born, and paſſed a great part of his life in Aſia Minor. This is an opinion which I have already taken pains to eſtabliſh. I have even thought, that, of conſequence, we ought to refer to theſe people, certain ſciences too delicate and refined for Homer to have

[i] Chalcid. in Tim. Plat. p. 30.
[k] Hiſt. animal. l. 1. c. 16. *init.*
[l] Book 3. c. 1. art. 2.
[m] Hiſt. of medicine, part 1. book 2. p. 74. & 75.

learned

learned them in the boſom of Greece properly ſo called. We ought not to give the honour of them to the inhabitants of that part of Europe. In the ages this poet appeared in, they were ſtill very ignorant and unpoliſhed.

I think I have ſaid enough to ſhew, that if we find a void in the hiſtory of medicine, from Podalirius and Machaon, the ſons of Æſculapius, till the time of Hippocrates, it is not becauſe the ſtudy of that ſcience was neglected in this interval. We ought to attribute the ignorance we are in of the names and capacity of thoſe who cultivated medicine at that time, only to the times in which they lived. The hiſtory of thoſe ages is moſt confuſed and defective. The phyſicians are not the only people who have cauſe to complain of it. We ſhall have but too many occaſions to be convinced of it with regard to many other objects.

CHAP. II.

Of Aſtronomy.

THE hiſtory of aſtronomy, in the ages we are now going through, is not altogether ſo barren as that of medicine. The writers of antiquity give us ſomething more aſſiſtance in examining the ſtate of that ſcience in theſe times amongſt the different nations of whom we are to ſpeak. The Babylonians, the Egyptians, and above all the Greeks, enable us to preſent the reader with ſome curious and intereſting details. Let us firſt examine the ſtate of aſtronomy amongſt each of theſe people in particular. We ſhall proceed to offer ſome general ideas reſulting from the different facts we are about to relate.

ARTICLE

ARTICLE I.

Of the Babylonians.

AS it is known how dark is the hiſtory of the Babylonians and Aſſyrians, we may be thought not very competent judges of the diſcoveries and of the progreſs which theſe people had made in aſtronomy. Nevertheleſs it will appear, that by collecting and comparing the different tracts we find ſcattered through the authors of antiquity, a pretty juſt idea may be formed of the aſtronomical learning of the Babylonians.

The Chaldean aſtronomers had learned that the ſun and the planets had a motion proper to themſelves from weſt to eaſt, and that theſe revolutions were made with great inequalities of time, and with very different degrees of velocity [n]. They taught, that the moon is placed below all the ſtars, and below all the planets; that as it is the leaſt of all thoſe which we perceive, it is alſo the neareſt to the earth [o]; that its revolution is performed in leſs time; not that it has a greater velocity than the other planets, but by reaſon of the ſmall extent of its orbit. They knew, moreover, that the moon has only a borrowed light, and that its eclipſes are cauſed by its immerging into the ſhadow of the earth [p].

The Chaldeans reckon but 36 conſtellations; 12 in the zodiac, and 24 without that circle. They diſtinguiſhed theſe laſt into northern and ſouthern [q]. They had divided each ſign of the zodiac into 30 degrees, and each degree into 60 parts, or minutes [r]. By this method the Chaldeans had

[n] Diod. l. 2. p. 144; Simplic. in l. 2.; Ariſt de cœlo, fol. 117. *verſo.*

[o] Diod. l. 2. p. 144. This paſſage of Diodorus deſerves attention. How came the Chaldeans to gueſs that the moon is in reality the leaſt of the planets? This was probably on their part only mere conjecture.

[p] Diod. l. 2. p. 144. 145. [q] Diod. ibid.

[r] Gemin. c. 15. p. 42.; Sext. Empiric. adv. aſtrolog. l. 5. p. 339.

found

found the mean motion of the moon. They had thus attained to determine the periodical return of that planet with a good deal of exactneſs [r].

The advantage which theſe aſtronomers had, of having very early invented the means of meaſuring exactly the different parts of the day, ought to give us a pretty good idea of their aſtronomical calculations. It is generally agreed, that they were the firſt who knew the uſe of ſun-dials [s]. Accordingly they paſſed for the firſt who had undertaken to meaſure the length of the ſun's annual revolution [t]. Their obſervations, in this reſpect, were not fruitleſs. We ſee, that, in the reign of Nabonaſſar, the year amongſt theſe people conſiſted of 365 days. The ancients make this clear enough, by telling us, that the years, formerly called the *years of Nabonaſſar*, anſwered, month for month, and day for day, to the civil year of the Egyptians [x].

If it were neceſſary, we might alledge the uſage of the Perſians in further confirmation of this opinion. From the reign of Cyrus this nation had regulated their year to 365 days [y]; and we know that Cyrus is the firſt who ſubjected the empire of Babylon to the throne of Perſia.

It is not ſo eaſy to determine at what time the Babylonians diſcovered the neceſſity of adding to their common year, the five hours and ſome minutes by which the annual revolution of the ſun ſurpaſſes the length of 365 days. It is certain, that this diſcovery had not eſcaped the Chal-

[r] Gemin. c. 15. p. 62. We may doubt however whether all this ſkill was very ancient among the Chaldeans. See Wiedler, hiſt. aſtronom. c. 3. p. 35.

[s] Herod. l. 2. n. 109. Herodotus does not fix the epocha of this diſcovery. We ought to judge however, that it muſt have been very ancient. We find ſun-dials in uſe at Jeruſalem in the time of Ahaz, that is to ſay, five years before the æra of Nabonaſſar. 2 Kings c. 20. v. 11. 2 Chron. c. 32. v. 31. It is very probable, that Ahaz had the knowledge of that mathematical inſtrument from the Babylonians. In effect, we learn from ſcripture, that this prince was in great union with Tiglath-Pileſer, king of Aſſyria. 2 Kings c. 16. v. 8. &c.

[t] Achill. Tat. ad. Arati phænom. c. 18.

[x] Cenſorin. de die nat. c. 21. See in the following chapter our remarks on the civil year of the Egyptians.

[y] Cf. Curt. l. 3. c. 3. p. 154. See alſo Diod. l. 2. p. 120.

dean

dean aſtronomers. Strabo aſſures us of it in very preciſe terms [z]; but he does not fix the epocha of it. However, the manner in which he expreſſes himſelf, gives us ſufficiently to underſtand that this knowledge was very anciently received in Chaldea. We have therefore good authority to believe, that, in the courſe of the ages now under conſideration, the year of the Babylonians conſiſted of 365 days and ſome hours *. We may even believe, that, in this reſpect, they had come very near the truth. I ſhall elſewhere ſpeak of it more particularly [a].

We have ſtill the names of the ancient aſtronomical periods, whoſe invention was due to the Chaldeans. Beroſus has made uſe of them for his chronological calculations [b]. Yet theſe meaſures of time, which were then in familiar uſe, are now but little known. Many difficulties ariſe about the number of years of which each of theſe periods was compoſed. The efforts which ſome modern critics have made to clear them up, do not hitherto give full ſatisfaction. That I may not interrupt the relation I am making of the aſtronomical learning of the Babylonians, I ſhall give an account of theſe different periods in a particular diſſertation [c].

The ſyſtem of comets which the Chaldeans had formed, merits alſo ſome attention. Apollonius of Mindus, a

[z] L. 17. p. 1160. A.

* Ubo Emmius, and after him Munkerus de intercalat. l. 3. c. 2. give us to underſtand, that the year of the Chaldeans was only of 365 days. They ſay, that to repair the confuſion produced through time, by the omiſſion of the fourth of a day, theſe people compoſed a month of it, which they added to their ordinary year at every 120 years; that by this means every 120th year conſiſted of 395 days, that is to ſay, of 13 months. But theſe writers cite no author of antiquity in ſupport of their opinion, and beſides they are formally contradicted by Strabo, as we have ſeen. We may therefore boldly place this opinion in the number of thoſe airy ſyſtems, which have no other foundation than the imagination of the author who gave them birth.

[a] In the diſſertation on the aſtronomical periods of the Chaldeans, at the end of this volume.

[b] See Syncell. p. 17.; Abyden. *apud eund.* p. 38. C.

[c] See, at the end of this volume, the diſſertation on the periods of the Chaldeans.

celebrated aſtronomer, tells us, that the Chaldeans, amongſt whom he had ſtudied, regarded comets as planets whoſe revolution was performed in orbits very excentric to the earth, and that theſe ſtars became viſible only in their progreſs through the lower part of that orbit. The ſame aſtronomers pretended alſo, according to Apollonius, to know the courſe of the comets and the duration of their periods [d]. Pliny, Plutarch, and Stobæus, ſpeak alſo very clearly of this ſyſtem of the Chaldeans [e]. I imagine however that more was due to chance and uncertainty than to ſtudy and experience [f]. The ancients knew nothing certain of this, nor of the greateſt part of the phænomena of phyſical aſtronomy.

We may alſo place in the number of the aſtronomical attainments of the Chaldeans, the ideas they had formed of the extent of the circumference of the terreſtrial globe. They had found out, it is pretended, that a man, walking a good pace, might follow the ſun round the earth, and would reach the equinoctial at the ſame time with that ſtar [g]; that is to ſay, that in the ſpace of a ſolar year, which the Chaldeans, as we have ſeen, determined at

[d] *Apud* Senec. quæſt. nat. l. 7. c. 3. t. 2. p. 820. & c. 17. p. 831.

[e] Plin. l. 2. ſect. 23. p. 89.; Plut. t. 2. p. 893.; Stob. eclog. phyſ. l. 1. p. 63. Pliny and Plutarch do not expreſsly ſay, this was the ſyſtem of the Chaldeans; but we may preſume, that the ancient philoſophers of Greece learned among theſe people what they ſay on comets. Seneca and Stobæus authoriſe us to believe it; ſince it appears by their writings, that this opinion upon the comets was very anciently eſtabliſhed in Chaldea.

[f] Seneca will furniſh us a proof of it in the ſame paſſage I have juſt cited, p. 820. He ſpeaks there of another aſtronomer, named *Epigenes*, who ſaid, that the Chaldeans knew nothing certain of the comets, and that they looked upon them as meteors, kindled by the effort of ſome vortex of air violently agitated. Theſe contradictions ought not to ſurpriſe us. There were many ſchools amongſt the Chaldeans. Pliny reckons three, l. 6. c. 26. p. 332. Different ſyſtems were taught in all theſe ſchools, according to the teſtimony of Strabo, l. 16. p. 1074. Thus Apollonius related that which was adopted in the ſchool where he had ſtudied, and Epigenes what was delivered in the one which he had followed; and there were then no reaſons which could give one ſyſtem more credit than another.

[g] Achill. Tat. ad Arati phænom. c. 18.

365 days and ſome hours, a man walking at a good rate, might make the tour of the earth, and would do it effectually, if he could always keep up an equal pace *.

This is all we have been able to collect of moſt preciſion upon the aſtronomical learning of the Chaldeans. They had, as we ſee, made ſome progreſs in certain parts of that ſcience; but there were many others, and thoſe of the greateſt importance, which were abſolutely unknown to them. The Chaldeans, for example, had but a very imperfect theory of ſolar eclipſes. They durſt neither determine nor foretel them [b]. Their ignorance in this matter does not proclaim any very exact knowledge, or very extenſive intelligence of the celeſtial phænomena. It may even be doubted, whether they did not acquire, in much later times, ſome part of the diſcoveries which I have thought might be aſcribed to them in the ages treated of in this third part of my work [c]. In reality, notwithſtanding the conqueſt of the Babylonian empire by Cyrus, and afterwards by Alexander, the Chaldeans always continued to be held in great conſideration, on account of the extreme reſpect which prepoſſeſſed the ancients in favour of the ſkill which theſe prieſts are ſaid to have acquired in judicial aſtrology. The deſtruction of the empire of Babylon did not then diſable the Chaldeans from perfecting their aſtronomical diſcoveries; and Diodorus, from whom I have borrowed moſt of the details I have here given account of, was not acquainted with theſe aſtronomers till long after the time of Alexander.

There remains no more but that I take ſome notice of the obſervatory of the Babylonians. The principal object of the ancient aſtronomers, was to perceive and catch the exact moment of the riſing and ſetting of the ſtars. The

* A man commonly makes a league an hour; of conſequence, could he always proceed without ſtopping, he would make 24 a-day, and 8760 in 365 days. We know that the circumference of the globe, about the equator, is about 9000 leagues. It reſults from this calculation, that the Chaldean aſtronomers had pretty juſt notions of the magnitude of the earth.

[b] Diod. l. 2. p. 115. [c] See Weidler, hiſt. aſtron. c. 3. p. 35.

moſt favourable places for this purpoſe which they firſt thought of, were extended plains, open on all ſides, where the eye might diſcover a vaſt and unbounded horizon. Plains were then, for many generations, the only obſervatories in uſe. But the civilized nations ſoon ſought to procure themſelves means of obſerving the courſe of the ſtars with more facility and exactneſs. In this view they conſtructed edifices whoſe elevation gave them more advantage. The Babylonians were not the laſt to avail themſelves of this practice. I have already had occaſion to ſpeak of the temple of Belus, ſo renowned amongſt thoſe ancient people [k]. This edifice incloſed in its centre an extremely elevated tower, whoſe conſtruction appears to have been more ancient than that of the temple itſelf [l]. It was from the ſummit of this tower that the Chaldeans made their principal obſervations [m].

ARTICLE II.

Of the Egyptians.

THE Egyptians, after the Greeks, are the people of antiquity whoſe progreſs in the ſciences we can the moſt eaſily trace. I have related, in the preceding books, the different ways that the Egyptians had regulated their year, firſt at 360 days, and afterwards at 365. Let us examine whether, in the ages we are now going through, they had attained any greater degree of exactneſs.

The ſun employs in his annual revolution 365 days and about ſix hours. I have given account of the motives which determined me to believe, that it was in theſe ages that the Babylonians had made diſcovery of this overplus of the fourth of a day. I am not equally led to believe that the Egyptians had alſo made the ſame diſcovery. Here are the motives which incline me to think otherwiſe.

Thales is the firſt of the Greeks who gave 365 days to

[k] *Supra*, book 2. chap. 1. p. 57.
[l] See Prideaux, hiſt. of the Jews, t. 1. l. 2. p. 218. 222.
[m] Diod. l. 2. p. 123.

the

the year. This philoſopher lived about the year 600 before the Chriſtian æra. Hiſtory remarks, that he had no other maſter than the Egyptians [n]. Therefore, in the time of Thales, the Egyptian year ſtill conſiſted of no more than 365 days.

Herodotus wrote in the fifth century before J. C. This great hiſtorian, whoſe teſtimony is ſo reſpectable in all that concerns the ancient Egyptians, ſays, ſpeaking of the year of this people, that it conſiſted of twelve months, each of thirty days, to which five days more were added every year. By this means, continues he, they contrived to make the periodical return of the ſeaſons anſwer to the ſame months of the year. We ſee by theſe laſt words, that Herodotus had not perceived the inconvenience of the confuſion of ſeaſons, which muſt neceſſarily happen in a long courſe of years of 365 days; and this is ſtill another proof, that in his time the Egyptian year was limited to the like number of days.

In fine, it appears by Strabo, that the Egyptians knew not the neceſſity of adding ſix hours or thereabouts to the 365 days of the common year, till about the time that Plato and Eudoxus travelled amongſt theſe people. At leaſt, it is certain, from the teſtimony of this geographer, that theſe two philoſophers learned this particularity from the Egyptian prieſts, and that till this time the Greeks were ignorant of it [o]. There is then great appearance, that the Egyptian aſtronomers made this diſcovery in the interval of the time elapſed between the voyage of Herodotus and that of Plato into Egypt, an interval of more than 80 years. The manner in which, according to Strabo, the prieſts imparted this to Eudoxus and Plato, ſerves, I think, to confirm this opinion. He repreſents this knowledge as a ſort of myſtery which they would not communicate to any but privileged perſons [p]. The learned of Heliopolis, ſays he, explained in ſecret to our two philoſophers the true duration of the ſolar year [q]. It was even only by an abode of thirteen years, that Plato and

[n] Diog. Laert. l. 1. ſegm. 27.; Clem. Alex. ſtrom. l. 1. p. 353.
[o] Strabo, l. 17. p. 1159. 1160. [p] Ibid. p. 1159. [q] Strabo, ibid.

Eudoxus

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Eudoxus could ſo far merit the confidence of theſe prieſts as to obtain the communication of this important diſcovery [r]. We ought not, as to the reſt, to be ſurpriſed that the Egyptians ſhould have then made a myſtery of it. The more recent this diſcovery was, the more likely were they to be jealous of it.

It may be ſaid, that if Herodotus has not ſpoke of this overplus of the fourth of a day, it is, that, in all probability, he may have been deceived by the practice of the Egyptians. This people had two computations of the year, the one civil, the other aſtronomical [s]. This laſt was of 365 days, and ſome hours; but their civil year had only 365 days [t]. It was not without deſign that the Egyptians had thus regulated it. They did not want their feſtivals to return always to the ſame day. On the contrary, their intention was, that they ſhould ſucceſſively run through all the ſeaſons of the year [u]. The Egyptians admitted then no intercalation in their civil years. They were conſtantly of 365 days [x], which occaſioned their gaining a day every four years upon the true ſolar year, with which theſe vague and retrograde years met only every 1460 years. It is only of this civil year of 365 days, it may be ſaid, that Herodotus intended to ſpeak, by ſo much the more as it ſubſiſted under that form among the Egyptians, even many ages after that in which Herodotus wrote. We learn it in the writings of Geminus, of Cenſorinus, and of Theon of Alexandria [y].

But if theſe two computations of the year had been known in Egypt in the time of Herodotus, is it to be ſuppoſed that an hiſtorian ſo exact, and ſo intelligent, would have neglected to have informed us of a particularity of this nature? Would he, moreover, have advanced in ſuch plain terms, that, by means of ſuch a year, the Egyptians contrived to make the periodical return of the ſeaſons fall

[r] Id. ibid. [s] See Diod. l. 1. p. 59.; Strabo, l. 17. p. 1171.
[t] See the mem. of the acad. of inſcript. t. 14. p. 340. 350. 35[illegible]
[u] Gemin. p. 33. Cenſorin. c. 18. Theo. Alexandrin. frag. apud Petav. uranolog.
[x] Gem. Cenſor. Theon. Diod. Strabo, *ubi ſupra.*
[y] See *loco ſupra citat.*

in

in the ſame months of the year? It is moſt certain, that Herodotus, otherwiſe greatly verſed in all the learning of the Greeks and Egyptians, was very ignorant of aſtronomy. We have already produced proofs of it, and the preſent example is a new conviction.

In effect, if this great hiſtorian had better underſtood the time that the ſun employs in performing his annual revolution, he would not have ſaid that a courſe of years of 365 days would procure the periodical return of the ſeaſons in the ſame months of the year. But this error into which Herodotus has fallen, is an inconteſtable proof that he knew no better; and this is the ſenſible difference we remark between this hiſtorian and the authors laſt quoted. When theſe laſt ſpeak of the civil year of the Egyptians, whoſe duration they mark at 365 days, there is not one of them but what mentions, at the ſame time, that fourth part of a day by which the true ſolar year exceeds that of 365 days. Beſides, Herodotus had ſojourned a conſiderable time in Egypt. He had even, as appears by his writings, inſinuated himſelf too far into the good graces of the prieſts of that nation, for them to have refuſed to reveal this diſcovery to him, if they themſelves had at that time known it, as they afterwards did to Eudoxus and Plato. We ſhould ſay as much of Thales, ſince hiſtory expreſsly remarks, that he had entirely gained the confidence of the Egyptian prieſts [z]. After theſe reflections, it appears to us impoſſible to attribute to the Egyptians, in the ages we are now employed on, the knowledge of the ſix hours or thereabouts by which the annual revolution of the ſun exceeds 365 days.

It is not to be preſumed, that the aſtronomers of Egypt had made very important diſcoveries on the magnitude of the ſtars. We may judge of them by that which they gave the moon. They believed that planet to be 72 times leſs than the earth [a]. What Macrobius relates of the method which the ſame ſages employed to find out the

[z] Diog. Laert. l. 1, ſegm. 27. [a] Plut. de facie in orbe lunæ, p. 932. A.

proportion

proportion of the ſun's diameter to his orbit, is not very apt to give us a great idea of their aſtronomical diſcoveries[b]. The manner in which he ſpeaks of it not permitting us, beſides, to doubt that this practice belonged to the ancient Egyptians; I ſhall try to explain it *.

According to Macrobius, the aſtronomers of Egypt placed upon an horizontal plane an hemiſpherical vaſe, the interior ſurface of which carried a ſtyle which paſſed through its centre, and roſe at right angles upon the plane of the circle, of which the edges of this vaſe made part. Theſe edges were divided into two equal demi-crowns, of which one was ſubdivided into twelve parts alſo equal; that is to ſay, into twelve ſegments of fifteen degrees each. They turned this vaſe to the eaſt in ſuch a manner, that the poſition of the ſtyle which they had adapted to it ſhould anſwer preciſely to that of the axis of the world, and that the twelve diviſions, juſt mentioned, ſhould appear at the lower part, in ſuch ſort, that the diameter of the mouth of the vaſe, which terminated theſe twelve parts, ſhould be found exactly parallel to the horizon. All this apparatus tended, as it is eaſy to be convinced, only to produce the effect of an equinoctial dial, the conſtruction of which is infinitely more eaſy and ſimple. However that might be, it was, according to Macrobius, by the help of ſuch an inſtrument, that the aſtronomers of Egypt imagined themſelves able to determine what proportion there was between that part of the ſun's orbit which is occupied by the body of that ſtar, and the whole of that orbit. The very day of one of the two equinoxes, ſays that author, they obſerved and marked upon the edges of the mouth of their hemiſpherical vaſe, the point where fell the ſhadow of the ſtyle which paſſed through its centre, at the inſtant when the

[b] In ſomn. Scip. l. 1. c. 20. p. 100. &c.

* Nothing is more obſcure than this explication given by Macrobius of the procedure of the Egyptian aſtronomers in the operation in queſtion. I dare not flatter myſelf with having rendered, as exactly as I could wiſh, the true ſenſe of this author. But I am certain, that, in what manner ſoever we underſtand this paſſage, we ſhall never diſcover any thing in it capable of giving us a great idea of this aſtronomical operation.

upper

upper edge of the ſun's diſk appeared upon the plane of the horizon. The evening of the ſame day they obſerved and marked in the ſame manner, the point of the half-circumference, oppoſite to the edges of their inſtrument, upon which fell the ſhadow of the ſtyle at the preciſe moment when the ſun's diſk began to touch the horizon with its lower edge. The difference of the interval of the two points of ſhadow to the entire half-circumference, or 180 degrees, was found to be the ninth part of one of the twelve horary diviſions or $1\frac{1}{3}$ degrees; from whence the Egyptians concluded, that the diameter of the ſun was preciſely the two hundred and ſixteenth part of its orbit [a]; a concluſion which it is not eaſy to reconcile to the moſt ſimple notions of elementary geometry [*], but which it would be very eaſy to rectify if the object were worth the pains, which I am very far from thinking. For, indepen-

[a] Macrob. *loco ſupra cit.*

[*] It ſuffices to have read the three firſt books of Euclid's elements, to be able to perceive that the reſult of the operation of which Macrobius ſpeaks, gives the ſemidiameter of the ſun equal to the chord of an arch of 30 minutes of the circular orbit which he deſcribes; whereas the Egyptian aſtronomers made it equal to the arch itſelf of 30 minutes, ſince they took the arch of 1 d. 40′ for the preciſe meaſure of the diameter of that ſtar.

The tranſlator confeſſes, that he could not obtain a clear idea of this inſtrument either from M. Goguet or from Macrobius. That the reader may judge for himſelf, he has laid the original before him.

Æquinoctiali die ante ſolis ortum æquabiliter locatum eſt ſaxeum vas in hemiſphærii ſpeciem cavata ambitione curvatum, infra per lineas deſignato duodecim diei horarum numero, quas ſtyli prominentis umbra cum tranſitu ſolis prætereundo diſtinguit. Hoc eſt autem, ut ſcimus, hujuſmodi vaſis officium, ut tanto tempore a priore ejus extremitate ad alteram uſque ſtyli umbra percurrat, quanto ſol medietatem cœli ab ortu in occaſum unius ſcilicet hemiſphærii converſione metitur. Nam totius cœli integra converſio diem noctemque concludit. Et ideo conſtat, quantum ſol in circulo ſuo meat, tantum in hoc vaſe umbram meare. Huic igitur æquabiliter collocato circa tempus ſolis ortus propinquantis inhæſit diligens obſervantis obtutus: et cum ad primum ſolis radium, quem de ſe emiſit prima ſummitas orbis, emergens umbra de ſtyli decidens ſummitate primum curvi labri eminentiam contigit; locus ipſe, qui umbræ primitias excepit, nota impreſſione ſignatus eſt; obſervatumque quamdiu ſuper terram ita ſolis orbis integer appareret, ut ima ejus ſummitas adhuc horizonti videretur inſidere, et mox locus ad quem umbra tunc in vaſe migraverat, adnotatus eſt, habitaque dimenſione inter ambas umbrarum notas quæ integrum ſolis orbem, id eſt, diametrum, natæ de duabus ejus ſummitatibus metiuntur, pars nona reperta eſt ejus ſpatii, quod a ſummo vaſis labro uſque ad [illegible]mæ lineam continetur.

dently of the miſreckoning which muſt have been produced by the little exactneſs of the ſingular inſtrument ſpoke of by Macrobius, the refractions, on the equality of which depended the juſtneſs of the operation in queſtion, are greatly different morning and evening; and the tranſparency of the air at the moment of the ſun's mounting the horizon, is nothing near the ſame as at the moment of its ſetting. Again, to leave the relation of our author, all this operation of the Egyptian aſtronomers tended only on their part to determine the real magnitude of the ſun's diameter. Of conſequence, it could be of no uſe to them, further than they had been able to find out the preciſe dimenſions of his orbit. And this is a point on which all the knowledge which Macrobius ſuppoſes them to have had, is reduced to very vague and uncertain conjectures.

Other authors attribute to the Egyptians a method ſtill more defective, to determine the proportion of the ſun's diameter to the orbit he deſcribes. The moment they began to diſcover the firſt rays of that ſtar, they cauſed, ſay they, a horſeman to ſtart, who galloped till the diſk of the ſun was entirely riſen. They then meaſured the ſpace which this horſeman had run in the time the ſun had taken to riſe upon the horizon; and as they knew how far the courſer employed on this occaſion could run in the ſpace of an hour, they determined, by a rule of three, the time that the diameter of that ſtar had employed to riſe upon the horizon[d]. It is eaſy to perceive how erroneous this way of meaſuring time muſt have been, and how little capable it was of ſupplying the invention of clocks.

As to the other aſtronomical attainments which the ancients have attributed to the Egyptians, we ſee few of them that can be ſaid to belong properly to the ages we are now engaged in; but it is not the leſs certain, that thoſe people had then made ſome progreſs in aſtronomy. They had particularly applied themſelves to ſtudy the mo-

[d] Weidler, hiſt. aſtronom. c. 4. n. 12. p. 58.

tion

tion of the ſtars [e]. The Egyptians are ſaid to have known the cauſe of the eclipſes of the moon. They knew that they were occaſioned by the ſhadow of the earth, into which that planet then immerges [f]. The aſtronomers of Thebes, or Heliopolis in particular, were reckoned very ſkilful in calculating of theſe phænomena, and even the eclipſes of the ſun, of which they gave beforehand a pretty juſt and exact detail [g]. Hiſtory has preſerved us one celebrated example of this, on the ſubject of that famous eclipſe which ſeparated the armies of the Medes and Lydians the moment they were engaged in battle. Thales had foretold that eclipſe [h], and we have already ſeen that this philoſopher owed all his aſtronomical learning to the Egyptians. They had alſo ſuſpected that the comets were ſtars that had periodical returns [i]. They had, moreover, attained the conſtruction of aſtronomical tables, by means whereof they aſcertained, with tolerable exactneſs, the revolutions of the planets, with their direct, ſtationary, and retrograde motions [k]. I have already given account of many of theſe aſtronomical attainments in the firſt part of this work, in treating of the diſcovery of the planets.

Furthermore, the Egyptians are ſaid to have perceived that the ſun was the centre of the motions of Mercury and Venus; and that, in certain poſitions, theſe two planets paſſed ſometimes above and ſometimes below the ſun [l]. We ought to look upon this important diſcovery as a proof how anciently obſervations were made upon the planets. But it appears certain to me, that the Egyptians had not yet acquired that knowledge of the motions of Mercury and Venus, in the times we are now going through. We find no traces of it in the moſt ancient authors. Vitruvius is

[e] Diod. l. 1. p. 59. 91. 92.; Strabo, l. 17. p. 1171.
[f] Diog. Laert. præem. ſegm. 11. [g] Diod. l. 1. p. 59.
[h] Herod. l. 1. n. 74.
[i] Diod. l. 1. p. 92. There is great appearance that Pythagoras had drawn from Egypt the ſyſtem which his diſciples delivered upon comets. See Ariſt. meteorol. l. 1. c. 6. *init.*; Plutarch. de placit. philoſ. l. 3. c. 2. *init.*
[k] Diod. l. 1. p. 59. 91. 92.
[l] Macrob. in ſomn. Scip. l. 1. c. 19. p. 92. 93. See alſo Vitruv. l. 9. c. 4.; Mart. Capella de nupt. Philol. et Merc. l. 8.

the firſt who has ſpoke of it; and it is very ſingular that Ptolomy, who was poſterior to Vitruvius, ſhould appear to have been abſolutely ignorant of that diſcovery. For, if this great aſtronomer had been acquainted with it, in all appearance he would never have contrived ſuch a ſyſtem as he has left us.

There are great appearances, that the ſyſtem which ſuppoſes the earth as a planet to revolve round about the ſun, was not abſolutely unknown to the Egyptians, even in the times we are going through in this third part. We know, that ſome Grecian philoſophers, and particularly the diſciples of Pythagoras, had a glimpſe, a very obſcure and imperfect one indeed, that our earth and the planets did revolve both round a common centre and round their own axis at the ſame time [m]. Difficult would it be to explain what they underſtood by this double motion which they gave to the planets [n]. They had no very clear ideas of the motion of the earth upon its own axis, nor of the uſe which might be made of it to explain the diurnal revolution [o]. Their ſyſtem was extremely confuſed and inexplicable [p]. The manner in which they explained the apparent motions of the ſtars and of the heavens, by the rotatory motion of the earth, preſents contradiction upon contradiction [q]. However that may be, it is to the Egyptians, nevertheleſs, that we ought to aſcribe theſe firſt ideas. We know that the greateſt geniuſes of Greece travelled into Egypt, and drew thence the learning with which they enriched their country. I repeat it, after this fact, we cannot conceive how Ptolomy, who had paſſed his days in Egypt, could have been ignorant of it, or, at leaſt, how he comes to have taken no notice of it. It is true, that the ſyſtem of this great aſtronomer is in ſome ſort more conformable to our ſenſes. It is ſufficient for aſtronomers who obſerve only the appearances of the celeſtial bodies. But it was not difficult, by rectifying the ideas of the Py-

[m] See mem. of the acad. of inſcriptions, t. 9. M. p. 2. & 3.
[n] Ibid. p. 6.
[o] See Plutarch. de placit. philoſ. l. 3. c. 13.; Achill. Tat. iſag. c. 19.
[p] See mem. of the acad. of inſcript. t. 9. M. p. 2. 3. & 6.
[q] Ibid. p. 3.

thagoreans,

thagoricians, to eſtabliſh notions much more ſimple, much more conformable to the laws of nature, and for that very reaſon more worthy of philoſophers. Copernicus has well ſhown us what advantage might be made of ſuch diſcoveries. But then the age of Copernicus was much more enlightened than that of Ptolomy. Beſides, all the notions which I have been relating were rather conjectures and ideas formed at random, than diſcoveries founded on reaſoning and experience [r]. This is perhaps the very reaſon why Ptolomy, though he might have known them, would not take notice of them. Theſe reflections, however, are foreign to our ſubject. Let us return to the Egyptians, and ſpeak of the ideas which theſe people appear to have had of the matter of which the fixed ſtars and the planets were compoſed.

They ſaid, that the ſtars were of fire [s], and they called the moon an ethereal earth [t]. I alſo take the Egyptians to have been the firſt authors of the plurality of worlds. Orpheus is the moſt ancient writer who has delivered that opinion amongſt the Greeks [u]. Proclus has preſerved us ſome verſes, in which we ſee that the author of the Orphics placed mountains, men, and well-built cities in the moon [x]. It is alſo very certain, that the Pythagoricians taught, after Orpheus, that each planet was a world, conſiſting of earth, air, and æther [y]. Apparently theſe philoſophers placed in theſe worlds all that may be in ours, ſince they believed them entirely alike. It is, moreover, from the Egyptians, that Orpheus and the Pythagoricians held theſe ſingular opinions. For it is known, that Orpheus and Pythagoras were indebted to Egypt for all

[r] See *infra* what we ſay on this pretended knowledge of the ancient philoſophers, art. 4.

[s] Diogen. Laert. præem. ſegm. 11. [t] Procl. in Tim. l. 1. p. 45.

[u] Plut. de placit. philoſ. l. 2. c. 13.; Euſeb. præparat. evang. l. 15. c. 30.; Stob. l. 1. eclog. phyſic. p. 54. lin. 24.

[x] In Tim. l. 4. p. 283. We may doubt whether the poems formerly cited under the name of Orpheus, were really the work of this famous philoſopher. It is certain, nevertheleſs, that theſe poems were extremely ancient. They were looked on as ſuch in the time of Plato. In Cratyl. p. 276. E. See alſo Jamblic. de vita Pythag. c. 34. p. 196.

[y] Plut. Stob. *locis cit.*

their

their learning [z]. Accordingly I have not hesitated to attribute this system to the ancient Egyptians.

I conclude what concerns the history of astronomy amongst these people, by some reflections upon the position of the pyramids of Cairo. In the last age, it was attempted to ascertain the variation or immutability of the poles of the earth and the meridians. For this purpose, it was necessary to compare, with our observations, those of the ancient astronomers, and to know exactly the longitude and latitude of the places they had inhabited [a]. On one side, M. Picard went in 1671 to verify the observations made by Tycho-Brahe in the island of Huen [b]. On another, M. de Chazelles went in 1694 to measure the pyramids of Egypt. I shall say nothing at present of the operations of M. Picard, that I may give all my attention to those of M. de Chazelles. Having measured the pyramids, he found that the four sides of the greatest answered precisely to the four cardinal points of the horizon. Such a position, which seems to have been the effect of design and premeditation, necessarily supposes astronomical knowledge. But, in my opinion, they have carried too high the idea under which they ordinarily present this operation of the Egyptians. They have laboured to heighten the merit of it by the comparison made between it and the meridian, traced at Uranibourg by Tycho-Brahe. M. Picard was greatly astonished when he examined that meridian, to find it different in longitude by about 18 minutes from the position which Tycho-Brahe had assigned it [c]. Tycho, however, assures us that he had beeen at pains to determine it [*]. And it is the more likely, as this was a fixed

[z] Diod. l. 1. p. 107.

[a] Acad. of scienc. ann. 1710, hist. p. 149. [b] Ibid.

The island of Huena or Veen is in the straits of the sound, at the entrance of the Baltic sea. It is there that Tycho caused to be built, in 1576, that famous observatory which he called *Uranibourg*, or *city of the heavens*.

[c] Acad. des scienc. anc. mem. t. 7. p. 226.

[*] Tycho says expressly, that it was for the second time that he had carefully taken his angles of observation, and after having verified the meridian line. Ibid. t. 7. p. 203.

point

point to which all his obſervations related. The Egyptians, ſay they, more dexterous, or, at leaſt, more lucky than this great aſtronomer, have ſucceeded in ſouthing their pyramids with an exactneſs, which is ſtill matter of aſtoniſhment; of aſtoniſhment the better founded, as theſe people were, in appearance at leaſt, deſtitute of the lights and helps neceſſary for ſuch an operation [a]. However that may be, the operation of the Egyptian aſtronomers will bear no compariſon in any manner with that of Tycho. It is evidently, and, beyond contradiction, infinitely more eaſy to ſouth any edifice, ſuch as the pyramids eſpecially, than to determine preciſely the longitude of any place whatſoever. For the one we need only draw a meridian; but for the other repeated obſervations muſt be employed, and thoſe of a kind which demand great ſtudy, knowledge, experience, and preciſion.

For the reſt, though I think the ſouthing of the pyramids has been too highly extolled, yet I am of opinion that it were unjuſt not to allow the Egyptians a pretty extenſive knowledge in aſtronomy. This nevertheleſs is what many writers of merit have thought fit to refuſe them [b]. The reaſon they alledge is, the little progreſs which theſe people, as they pretend, had made in geometry. Indeed, if this fact were well proved, I own we could not conceive a great idea of the aſtronomers of Egypt; but then this ſuſpicion of their ignorance in geometry is founded only on conjectures; and even theſe conjectures ariſe only from inductions drawn from the geometrical diſcoveries of which the Greeks boaſted themſelves to be the authors. When we come to treat of the article of geometry amongſt the Egyptians, we hope to ſhew how little grounds there are for this opinion. In favour of theſe people we ſhall produce teſtimonies more certain and more authentic than all theſe reports of the Greeks, againſt which it is often not amiſs to be upon our guard.

[a] Acad. of ſciences, ann. 1710, hiſt. p. 149.
[b] See Wolfius, hiſt. aſtronom. p. 64.

ARTICLE

ARTICLE III.

Of the Greeks.

FRom what I have ſaid, in the preceding books, of the ſtate of the ſciences amongſt the Greeks, we cannot have conceived a very high idea of the capacity of theſe people. The epocha we are now going through, will not be much more favourable to them. Plutarch, it is true, has remarked, that, about the time of Heſiod, the ſciences began to unfold themſelves in Greece [f]. But the progreſs they made was ſtill very ſlow. We can affirm, that, till the time of Thales, that is, till the year 600 before Jeſus Chriſt, the Greeks had but very poor notions of the fundamental principles of aſtronomy and geometry [g]. They even availed themſelves but very indifferently of the diſcoveries communicated to them by Thales, and his diſciple Anaximander. We may judge of it by the facts I am about to relate.

To determine the length of the year, is the principal end propoſed in all their obſervations on the motion of the ſtars. In the ſecond part of this work, I have given an account of the efforts which the Greeks made to attain it. There we have ſeen, that for many ages theſe people advanced no further than to add ſix days to the 354 of which their year was originally compoſed [h]. It was regulated in this manner in the time of Solon, and alſo a long time after him [i]. Theſe years were formed of twelve lunar months, which they ſuppoſed to conſiſt of 30 days each. By this it appears that the Greeks had regard rather to the courſe of the moon, than to that of the ſun. By proceeding upon this calculation, they formed neither a lunar nor a ſolar year [k].

[f] T. 2. p. 744.
[g] See Eudem. *apud* Diog. Laert. l. 1. ſegm. 23.; Apuleius, flo. l. 1.
[h] Book 3. c. 3. art 2. ſect. 2. [i] See Marſh, p. 610. 611. [k] Ibid.

The

The diſorders which ſuch a calendar muſt occaſion, are eaſy to conceive. Accordingly the Greeks were obliged at every turn to make amendments, by correcting either the months, or the years. They cut off from the month, ſometimes one day, ſometimes two [l]. It happened beſides, that after a certain time their twelve lunar months no longer anſwered to the four ſeaſons of the year. To ſalve this, the Greeks added a thirteenth; but circumſtances alſo occurred which obliged them to omit this intercalary month *. Thus they were always under a neceſſity of inventing new expedients.

To the little progreſs which aſtronomy had made in Greece, we ought to attribute that number of different periods of which I have given account in the ſecond part of this work. Religion had given birth to them in a great meaſure. Moſt of theſe cycles had been invented only to adapt the celebration of the feaſts to the times preſcribed by the oracles. But we may ſay of theſe periods, that they give us no more advantageous idea of the people who invented them, than do the feſtivals for which they were inſtituted.

It is very aſtoniſhing that the Greeks ſhould have been ſo many ages without diſcovering the imperfections of their calendar, and the confuſion they were thrown into by the method they purſued. It is agreed, that Thales underſtood the year conſiſting of 365 days [m]. Poſterior to this philoſopher, Plato and Eudoxus learned in Egypt, that the ſun employs in his revolution, not only 365 days, but alſo near ſix hours [n]. Nevertheleſs, in the time of Demetrius Phalereus, the year of the Greeks ſtill conſiſted of no more than 360 days [o]. They had had it however a long

[l] Cicero in Verrem, act. 2. l. 2. n. 52. t. 4. p. 244.

* We ſee, that in the time of Herodotus the Greeks were in uſe of adding a thirteenth month after two complete years, that is to ſay, at the beginning of every third year, l. 2. n. 4. But as, by this method, their years became too long by a month at the end of eight years, every eighth year they omitted an intercalary month. Cenſorin. c. 18.

[m] Diog. Laert. l. 1. ſegm. 27. [n] Strabo, l. 17. p. 1160. 1161.

[o] Plinſ. 33. ſect. 12.; Varro *apud* Nonium. Demetrius Phalereus flouriſhed about the year 300 before Jeſus Chriſt.

time in their power, as we have ſeen, to have regulated the length of it, in a manner more analogous to that of the ſun's revolution. We cannot conceive from what motives the Greeks ſhould ſo long have perſiſted in keeping a form of year ſo defective as that we have been ſpeaking of. Their moſt ſenſible writers have paſſed this judgment on it; and Herodotus, ſpeaking of the year of the Egyptians, could not help remarking that their method was much wiſer than that of the Grecians [p]. Accordingly we ſee, that the beſt aſtronomers of Greece, ſuch as Cleoſtratus, Harpalus, Nauteles, Mneſiſtratus, Doſitheus, Eudoxus, Meton, Callipus, &c. were obliged many times to change the rules of intercalation, and ſucceſſively to invent different periods, the better to make their months agree with the courſe of the moon, and their years with that of the ſun [q].

The manner in which the Greeks reckoned and named the days of their months, appears to me no leſs ſingular and fantaſtical than the form of their calendar.

The Greeks divided the month into three parts, each of ten days. The firſt ten was called "the ten of the month "beginning *"; the ſecond, that of the "month which is "in the middle †"; and the third, that of the "month con"cluding ‡". The firſt ten was counted progreſſively; thus they ſaid the firſt, ſecond, third, &c. of the month beginning. But as the Greeks never counted the day of the month higher than ten, when they would expreſs, for example, the 16th, they ſaid the ſecond ſixth; that is to ſay, the ſixth day of the ſecond ten. In like manner, for the third ten, inſtead of ſaying the 24th, for inſtance, they ſaid the third fourth. Such was ſtill the Grecian manner of reckoning in the time of Heſiod [r].

Solon introduced ſome change in the appellation of the days of the third portion of the month. He brought up the cuſtom of counting from the twentieth day to

[p] L. 2. n. 4. [q] See Marſham, p. 614. et ſeq.
* Μηνὸς ἱσαμενε. † Μηνὸς μεσοῦντος. ‡ Μηνος φθινοντος.
[r] Dies, v. 814. et ſeq.

the

the thirtieth, not by addition but by ſubſtraction, decreaſing always according to the waning of the moon. Thus inſtead of ſaying the third firſt, that is to ſay the twenty-firſt, he ordered, that they ſhould ſay the tenth of the "month concluding;" the ninth of the "month concluding" for the 22d, and ſo for the reſt [r]. Sometimes they even ſuppreſſed the expreſſion of the "month concluding," when they reckoned ſeveral days ſucceſſively, becauſe then it was not poſſible to miſtake [s]. It is not eaſy to conceive how a people of whom we commonly entertain ſo high an opinion, could follow ſo unnatural and extravagant a way of reckoning. The reform introduced by Solon, was ſtill more defective than the cuſtom of which it took place.

This oddity is remarkable even in the name which the Greeks gave the laſt day of their month. They regulated their months by the courſe of the moon; conſequently, theſe months conſiſted alternately of thirty and of twenty-nine days; yet the name of the thirtieth or *triacade* was common to the laſt day of them both [t]. Thales was the firſt author of this cuſtom [u].

It muſt alſo appear very ſingular, that the Greeks, who derived from the Orientals a great part of the elementary knowledge of aſtronomy, ſhould not have followed the cuſtom which thoſe nations had, from time immemorial, of dividing the week into ſeven days [x]. We have juſt ſeen, that the Greeks divided their months into three decads or tens, which they named, the month beginning, the month in the middle, and the month concluding. Such alſo was the form of their weeks. It was not till many ages after thoſe we are now conſidering, that they conformed themſelves to the practice of the eaſtern nations, and divided their week into ſeven days [z].

In the ages we are now going through, the Greeks, generally ſpeaking, had yet but extremely narrow ideas of

[r] Plut. in Solone, p. 92. C. [s] Id. ibid.
[t] Genſin. c. 6. p. 68.; Schol. Heſiod. dies, p. 166. &c. edit. Hienſ.
[u] Diog. Laert. l. 1. ſegm. 24. [x] See part 1, b. 3. chap. 2. art. 2.
[z] Dion Caſſius, hiſt. Rom. l. 37. p. 42.

aſtronomy. It is certain, that they then knew but a very ſmall number of the conſtellations [a]; and it was the ſame with regard to the planets. Their knowledge in this article was reduced to Venus. This is the only planet made mention of in Homer and in Heſiod. It may perhaps be ſaid, that the ſilence of theſe two poets upon Mars, Jupiter, &c. is no proof, that in their times theſe planets were unknown in Greece; and we might admit of this anſwer, were we not elſewhere acquainted with the ignorance of the Greeks upon this ſubject. But it is a fact not to be doubted. Democritus, by the account of Seneca, ſuſpected that there were many wandering ſtars; but he did not venture to determine either the number or the courſe of them; for, adds Seneca, the Greeks did not yet know, that there were five planets [b]. Eudoxus was the firſt who brought from Egypt into Greece the knowledge of theſe ſtars [c]. It is then certain, that till the time of this philoſopher, that is, till about the year 400 before Jeſus Chriſt, the Greeks remained in the moſt profound ignorance of the nature and motion of the heavenly bodies. We may the better judge of this by the ideas which they had formed of Venus.

The luſtre with which this planet ſhines, had ſtruck the Greeks; but its motions had thrown this people into a very groſs error. We know, that Venus appears alternately before the ſun's riſing and after his ſetting, according as ſhe is more to the weſt or more to the eaſt than the ſun. The Greeks never imagining that one and the ſame ſtar could appear under two ſuch oppoſite aſpects, thought they ought to attribute them to two different ſtars. In conſequence of this idea, Venus amongſt theſe people received two names, which, as they are expreſſive of her two oppoſite ſituations, really ſhow that the Greeks of one planet had made two. Thus, when Venus appeared before the riſing of the ſun, they called her *Eoſphoros*, that is to ſay, the herald of the morn; but when ſhe appeared only after his ſetting, they

[a] See part 2. b. 3. chap. 3. art. 2. § 2. [b] Nat. quæſt. l. 7. cap. 3.
[c] Id. ibid.

named

named her *Eſperos*, the evening-ſtar. Venus is never diſtinguiſhed by any other than theſe two names in Homer and in Heſiod; and, by the by, this is a pretty clear proof, that it was very late before the Greeks thought of deſigning their planets by the names of the deities they adored.

Appollodorus pretends, that Pythagoras was the firſt who made known to theſe people, that the Venus of the morning and the Venus of the evening were one and the ſame planet [d]. But, according to ſome other writers, this knowledge ſhould be ſtill more recent in Greece. They give the honour of it to Parmenides [e], poſterior by about fifty years to the philoſopher of Samos.

The ſame uncertainty reigns on the hiſtory of all the aſtronomical diſcoveries made in Greece. The epochas of them cannot be exactly marked. The ancients, for example, are divided about what time the Greeks became acquainted with the obliquity of the ecliptic. Some of them attribute this diſcovery to Pythagoras [f], others to Anaximander his diſciple [g]. There are even ſome who will have Oenopides of Chios to have been the firſt who perceived it [h]. What appears moſt probable to me in the queſtion is, that Anaximander was the firſt who ſhowed the Greeks by how many degrees the zodiac was inclined to the equator. The manner in which Pliny has expreſſed himſelf in ſpeaking of the diſcovery attributed to this philoſopher, ſeems to favour the explication I propoſe [i]. Perhaps alſo before Anaximander, the learned made a myſtery of that knowledge. This philoſopher divulged it, and by that means facilitated to every one the means of applying to aſtronomy with ſome

[d] Apud Stob. eclog. phyſ. l. 1. p. 55.; Plin. l. 2. ſect. 6. p. 75.; Diog. Laert. l. 8. ſegm. 14.

[e] Phavorin. apud Diog. Laert. l. 9. ſegm. 23.

[f] Plut. t. 2. p. 888. C.; Autor libri de hiſt. philoſ. apud Galen. t. 2. c. 12. p. 35.

[g] Plin. l. 2. ſect. 6.

[h] Diod. l. 1. p. 110.; Plut. *loco cit.*; Eudemus apud Fabric. B. Gr. t. 2. p. 278.

Oenopides is thought poſterior by ſome years to Anaxagoras, whoſe time is well enough known through his diſciple Pericles.

[i] *Obliquitatem ejus intellexiſſe*, loco cit.

ſucceſs.

ſucceſs. This opinion alſo may receive ſome authority from the expreſſions of Pliny [k].

Neither is this the only aſtronomical diſcovery the honour of which the ancients have thought due to Anaximander. He is the firſt, ſay they, who found the art of explaining the revolutions of the ſun and the equality of days and nights; that is to ſay, that among the Greeks his was the honour of firſt acquiring the knowledge of the equinoxes and ſolſtices, and of reducing to fixed principles the regular variety of the ſeaſons [l]. Thales, his maſter, had determined the ſetting of the Pleiades to the 25th day after the autumnal equinox. Anaximander marked it at the 29th, or even at the 31ſt [m]. Of all the diſcoveries with which this philoſopher enriched the Grecian aſtronomy, that of ſun-dials is without doubt the fineſt and moſt important. He made trial of them at Lacedæmon [n]. I had forgot to ſay, that Anaximander paſſed, according to Pliny, for the firſt of the Greeks who had undertaken to conſtruct an artificial ſphere [o].

The hiſtory of the diſcoveries attributed to this philoſo-

[k] *Rerum fores aperuiſſe*, loco cit. [l] Acad. des inſcript. t. 10. p. 23. 24.
[m] Weidler, hiſt. aſtron. p. 76. [n] Diog. Laert. l. 2. ſegm. 1.

Salmaſius has pretended, that the inſtrument of which the invention is by Diogenes Laertius attributed to Anaximander, muſt have been very inferior to a ſun-dail. If we believe him, this inſtrument only ſerved to mark exactly the points of the ſolſtices and equinoxes, the meridians and ſeaſons. The uſe of this inſtrument, adds Salmaſius, could not extend ſo far as to trace the courſe of the ſun from the moment of his riſing to that of his ſetting. But Salmaſius, more commendable for the extent of his erudition, than for the juſtneſs of his criticiſm, aſſigns, contrary to his own intention, to the inſtrument invented by Anaximander, properties infinitely ſuperior to thoſe of a ſimple ſun-dial.

Herodotus, moreover, ſays poſitively, that the Greeks had learned from the Babylonians the uſe of clocks, and the diviſion of the day into twelve equal parts, l. 2. n. 109. Herodotus wrote only about 100 years after Anaximander. He does not ſpeak of that knowledge as a novelty lately eſtabliſhed in Greece. The authority of this great hiſtorian would, therefore, lead me to believe, that Anaximander was not, properly ſpeaking, the inventor of ſun-dials amongſt the Greeks; they had learned the uſe of them from the Babylonians. But this philoſopher may undoubtedly have brought the making of ſun-dials to perfection, and by that have deſerved to be regarded as in ſome ſort the inventor of them.

[o] L. 7. ſect. 56. p. 416.

pher,

pher, furniſhes us moreover with very ſtriking proofs of the little progreſs which phyſical aſtronomy had made in Greece. What can we think of the ideas which the aſtronomers of this country had formed at that time of the magnitude of the heavenly bodies? Anaximander did not believe the ſun to be bigger than Peloponneſus [p].

I ſhall dwell no longer upon the knowledge which the Greeks may have acquired in aſtronomy in the ages which terminate this third part of our work. I believe I have ſaid enough to enable us to ſet a proper value upon it. However, I ſhall ſtill touch a little upon the ſubject, and even come down to pretty modern times, in the following article, where I propoſe to examine and compare the progreſs which the ancient nations had made in aſtronomy.

ARTICLE IV.

Reflections on the aſtronomy of the Babylonians, Egyptians, and Grecians.

ACcording to Pliny, three nations only are reckoned in antiquity who rendered themſelves famous for their progreſs in aſtronomy; the Chaldeans, the Egyptians, and the Grecians [q]. We have given account of all that the ancients have been able to furniſh on the aſtronomical learning of the Babylonians and Egyptians. Theſe diſcoveries belong to the ages in the limits of our work. From that epocha there is nothing that can be directly attributed to theſe people. I have more than once had occaſion to ſhew the reaſons of this. We are now therefore enabled to judge of the learning and of the diſcoveries of the Egyptians and of the Babylonians in aſtronomy.

It is not quite the ſame thing with the Greeks. The ſciences in general had as yet, in the ages which cloſe this

[p] Plut. de placit. philoſ. l. 2. c. 20.; Diog. Laert. l. 2. ſegm. 1.
[q] L. 18. ſect. 57. p. 129.

third

third and laſt part of our work, made but a very indifferent progreſs amongſt theſe people. We cannot therefore judge of the extent of their aſtronomical learning, by all that I have hitherto had occaſion to ſay of it. But to facilitate the compariſon of the various improvements in this ſcience amongſt the different nations of antiquity, I have thought proper to anticipate the times; I ſhall therefore indicate in few words the epocha at which aſtronomy began to merit the name of ſcience in Greece. Let us firſt ſpeak of the Chaldeans.

Although the Greeks have not been very careful to ſearch into the hiſtory of the eaſtern nations, they did not however neglect to inſtruct themſelves in the diſcoveries formerly made in thoſe countries. Their writers ſay enough of them to enable us to pronounce upon the rank which the Chaldeans ought to hold amongſt aſtronomers. We have ſeen by the details into which I entered on the article relating to theſe people, that they muſt have acquired a pretty extenſive knowledge of the celeſtial motions. Their aſtronomical obſervations are the moſt ancient that are known in antiquity [r]. When Hipparchus and Ptolomy, who lived in Egypt, undertook to reform aſtronomy, they found in the memoirs of the Egyptians, no aſtronomical obſervations comparable for antiquity to thoſe of the Babylonians [s]. In a word, the beſt writers of Greece have agreed, that their nation had borrowed much from the Chaldeans. Theſe people ſhare with the Egyptians the honour of having taught the Greeks the firſt principles of aſtronomy [t].

It is true, that the Egyptians appear to have had the preference for exactneſs, and for what may really be called aſtronomical ſcience. It is even uſual enough with us to look upon the Chaldeans rather as aſtrologers than as aſtronomers; and we pretend not to diſguiſe, that in

[r] Symplic. in l. 1. Ariſt. de cœlo. fol. 27. in l. 2. fol. 117. verſo.; Syncell. p. 207. C.; Marſham, p. 474.

[s] Marſham, *loco cit.*

[t] See Herodotus, l. 2. n. 109.; Strab. l. 17. p. 1161.; Theon, ad Arati prognoſt. p. 80.; Syncell. p. 207. C.

many

many reſpects they do indeed deſerve this reproach. But it muſt be obſerved at the ſame time, that the Chaldeans were not the only people infatuated with the chimæras of aſtrology. There is no nation of antiquity who have not given into them; neither have the Egyptians been more exempted than others [w]. Beſides, we have already obſerved, that aſtrology muſt have been of very great ſervice to aſtronomy [x]. The ſtudy of this frivolous and ridiculous ſcience, ſhould not therefore in this reſpect be a reproach to the Chaldeans.

Ought we not rather to attribute the pre-eminence which the Egyptians poſſeſs over all the nations of antiquity, to the partiality and prejudices of the Greeks? From them we derive all that we can know of the ſtate of the ſciences amongſt ancient nations. Moſt of the great ſettlements in Greece were formed by colonies ſent from Egypt; and the Greeks receiving their firſt inſtructions in the ſchool of the Egyptians, naturally regarded them as the inventors of all the ſciences. In time they ſought to exalt this opinion, and in this view almoſt all their writers have ſpoke of it. However, this preference has had no other cauſe or foundation, than the high eſteem with which the Greeks were poſſeſſed for a nation from whom they derived almoſt all their learning. It was very late, on the other hand, that theſe ſame Greeks became acquainted with the nations of the Higher Aſia, and being then enriched by their own proper funds, they needed to borrow little or nothing from ſtrangers. It is not therefore ſurpriſing that their hiſtorians ſhould have neglected to expatiate upon the diſcoveries of the Chaldeans; they took not the ſame intereſt in them as they did in thoſe of the Egyptians.

What we have here ſaid is not intended to conteſt with

[w] Herod. l. 2. n. 82.; Diod. l. 1. p. 91. 92.; Cicero. de divin. l. 1. n. 1. t. 3. p. 4.; Plut. conviv. ſap. p. 149. A.

[x] Part 1. b. 3. c. 11. art. 2. I repent bitterly, ſaid Kepler, the having ſo much decried aſtrology. I remark, that the ſtudy of aſtronomy has been greatly neglected ever ſince men ceaſed to apply themſelves to aſtrology.

the Egyptians the merit of having made many diſcoveries in aſtronomy: far from ſuch a thought, we have forgot nothing that might render to theſe people all the juſtice which is due to them; but we muſt not ſuffer the bad example of the Greeks to prejudice and impoſe upon us. Let us not exalt the Egyptians too highly at the expenſe of the Chaldeans. I do not think the one much more learned than the other *.

As for the Greeks, we cannot deny but that they made a great progreſs in aſtronomy; but then that progreſs was very ſlow. I even doubt whether, without the repeated helps of the Egyptians and Babylonians, that ſcience would ever have riſen in Greece beyond the moſt ordinary and limited experiments [y]. Thoſe of the Grecian philoſophers who began to make known to their nation the principles and rules of aſtronomy, had travelled for them into Egypt and into Chaldea. If Thales has foretold an eclipſe, it was not the fruit of his own proper diſcoveries, nor of the labours of the Grecian aſtronomers who preceded him; from them he had no aſſiſtance to expect. Thales can certainly have foretold that eclipſe only by means of ſome method, ſome ſet of rules that he had learned from the Egyptians [z].

Herodotus is the moſt ancient author who has ſpoken of that eclipſe foretold by Thales. We may conjecture, that he intended to ſpeak of an eclipſe of the ſun which happened at the time the Medes and Lydians were engaged

* As far as I can judge, the Chaldeans and Egyptians knew little more of aſtronomy than the Peruvians, Mexicans, and Chineſe.

[y] See Strabo, l. 17. p. 1161.

[z] See Weidler, hiſt. aſtron. p. 71. We may very well compare the knowledge which Thales and the other philoſophers of his time had in aſtronomy to that of the Indian bramins at this day. The bramins have the tables of the ancient aſtronomers to calculate eclipſes, and they know how to make uſe of them. But though they do foretel eclipſes by this means, we are not thence to conclude that they are very ſkilful in aſtronomy. All their ſcience conſiſts in a pure mechaniſm, and in ſome arithmetical operations. They are abſolutely ignorant of the theory of aſtronomy, and have no knowledge of the mutual relation and dependence of the different parts of that ſcience. Lettr. édif. t. 15. p. 36. and 37.

in

in battle. I ſay conjecture; for ſurely the manner in which Herodotus ſpeaks of that phænomenon is very ſingular. He ſays, that in the time when the two armies were engaged, the night ſuddenly took place of the day [a]. Thales, adds he, had foretold this event to the Ionians, and had laid down to them nearly the year in which ſhould take place "this change of day into night." Theſe are his terms [b]; and we may infer from them, that in the time of Herodotus the Greeks comprehended not, nor knew any thing of eclipſes. We even ſee that there was not at that time in the Greek language any term to expreſs theſe phænomena. Herodotus would certainly have made uſe of it, and not had recourſe to a periphraſis to ſignify an eclipſe which ſeparated the Medes and the Lydians.

It appears certain, by the conſent of all antiquity, that, before the voyage of Plato and Eudoxus into Egypt, the Greeks had no idea of what may be called aſtronomical ſcience. They were ignorant of the true duration of the ſolar year [c], knew nothing of the planets [d], had no idea of eclipſes, and in a word conceived but in a very confuſed manner the revolutions and motions of the heavenly bodies. Till the time of Alexander theſe people had made no diſcovery comparable to thoſe of the Egyptians and Babylonians. The Greeks excelled at that time in the fine arts, their laws were wiſe; but they had given little application to the ſpeculative ſciences, ſuch as aſtronomy, geometry, phyſic, &c.

The event which, after the death of Alexander, placed the Ptolomys upon the throne of Egypt, occaſioned the Greeks to make more progreſs in aſtronomy in one age, than they had hitherto done in near two thouſand years. Being now in a better ſituation than ever for profiting by the lights and diſcoveries of the Egyptians, they were not long of availing themſelves of them in the moſt advantageous

[a] L. 1. n. 74. [b] Id. ibid.
[c] Strabo, l. 17. p. 1161. [d] See above, p. 116.

manner. Greece victorious and enriched by the ſpoils of conquered Egypt, very ſoon ſurpaſſed her maſters. But are we not authoriſed to refer in ſome ſort to the Egyptians, the greater part of the diſcoveries with which the Greeks have honoured their philoſophers? In effect, it is certain, that the moſt famous aſtronomers in which Greece glories, Ariſtillus, Thimochares, Hipparchus, Ptolomy, &c. were bred in the ſchool of Alexandria. They it was who began to give the Greeks ſome knowledge of the proper motion of the fixed ſtars [e]. Hipparchus was the firſt who undertook to make a catalogue of theſe ſtars [f]. We may judge from theſe facts of the ſtate of aſtronomy in Greece before the Ptolomys; that is to ſay, two hundred years before Jeſus Chriſt. Shall we give the name of ſcience to the poor notions which till this time the Greeks had had of the celeſtial phænomena?

We ſhall finiſh what concerns the ſtate of aſtronomy amongſt the ancients, by ſome reflections upon the difficulties that attended the ſtudy of that ſcience in remote times. The inſtruments which the ancient aſtronomers made uſe of, muſt have been extremely defective and imperfect. They had not the uſe of pendulums, ſo convenient, or rather ſo neceſſary for making obſervations; neither were they acquainted with teleſcopes. Logarithms, which now ſpare us ſo many multiplications and diviſions, were equally unknown to them. In what laborious and enormous calculations muſt not the problems of aſtronomy have engaged theſe ancient obſervers? The arithmetical characters were another increaſe of trouble and perplexity. They had not the uſe of the numerical figures of the Arabians, ſo commodious for all operations in numbers. Anciently

[e] See Weidler, hiſt. aſtron. p. 124.

[f] Plin. l. 2. ſect. 24. The judgment which Pliny paſſes on that enterpriſe of Hipparchus, always appeared ſingular to me. Theſe are the terms he employs to characteriſe it: *Idemque (Hipparchus) auſus rem, etiam Deo improbam, annumerare poſteris, ſtellas, et ſidera ad nomen exſtingere.* Yet without ſuch a catalogue we do not conceive how there could exiſt a ſcience really worthy the name of aſtronomy.

arithmetical

arithmetical operations were executed by means of little ſtones, which they ranged upon tables made on purpoſe *; and to write down the ſum of theſe calculations the ancients had no other numerical ſigns, than the letters of their alphabet. To determine eclipſes by ſuch means, the proceſs was more tedious and more difficult, than if we ſhould now-a-days undertake to calculate them with counters, and write the amount in Roman figures.

I had almoſt forgot to make one obſervation, which, however, I think eſſential in the examination of the aſtronomical learning of ancient nations. Some philoſophers of antiquity appear at firſt ſight to have had a glimpſe of ſome of thoſe ſhining truths which are the boaſt of modern ages. Certain authors have thought fit in conſequence to advance, that the ancients knew much more of them than we ſhould naturally be led to believe. But when we reflect attentively on theſe pretended diſcoveries, we very ſoon perceive, that all which we read on this ſubject in the writings of the ancients, ought to be regarded as mere ideas advanced at random, without knowledge, without principles, and without any kind of foundation. If ſome of the ancients, for example, have ſaid that the earth was a ſpheroid, flattened at the poles; that it revolved round the ſun; that the comets were planets, whoſe periodical revolutions were completed in a certain number of ages; that the moon might be habitable; that that planet was the occaſional cauſe of the flux and reflux of the ſea, *&c.* †, we ought not to regard theſe propoſitions in their mouth, as the effect and the reſult of the knowledge which theſe philoſophers had acquired. On the contrary, we ought to place them on the footing of theſe hypotheſes which an uncertain and ill-regulated imagination daily produces. I ſay ſo, becauſe none of the ancient philoſophers have been able to give reaſons for what they deli-

* See the epigram of the ſecond book of the Anthology, which begins with theſe words, Καλλιγενης ἀγοραιος.

† See *ſupra*, art. 1. & 2. p. 104. & 105.

vered;

vered; which we may be eaſily convinced of, by reading the manner in which the writers of antiquity relate the opinions of their learned. There we ſee that the ancients had no reaſons preponderating to adopt one ſyſtem rather than another; neither were they ever able to give any of them the ſlighteſt demonſtration [h]. For the reſt, I do not pretend to make this a matter of reproach to the ancients. They were deſtitute of all helps proper to acquire theſe branches of knowledge. If, nevertheleſs, they have ſometimes hit upon the truth, we ought to attribute it to pure chance; and be ſenſible, that, as they wavered in uncertainty, and ran through all poſſible combinations, it is not aſtoniſhing that they ſhould hit upon the true one, becauſe the number of theſe ſorts of combinations is not infinite. In this reſpect conſiſts the characteriſtical difference between the aſtronomical learning of the ancients, and that of the moderns. What at this time we affirm of the figure of the earth, of the ſyſtem of the heavens, of the cauſe of the flux and reflux of the ſea, *&c.* is not the effect of chance and imagination; it is the reſult of much obſervation, experience, and reflection, and every aſtronomer is able to ſupport by reaſons the ſyſtem which he has thought fit to embrace.

CHAP. III.

Geometry and Mechanics.

I Have reſerved for this laſt part, the few details I intend to enter into upon the ſtate of geometry and mechanics. Amongſt the Babylonians, and amongſt the Egyptians, we muſt not expect a great inſight into the diſcoveries made by theſe people in the different branches which compoſe theſe two ſciences. All the literary monuments of the an-

[h] See *ſupra*, art. 2. p. 104, & 105.

cient

cient eaſtern nations are aboliſhed *. None of their writers has eſcaped the injuries of time. Thoſe even of Greece, the only ones which could now inform us of the ſciences cultivated by the Babylonians and Egyptians, give us but very little light into this ſubject. Nevertheleſs I do not think we are abſolutely incapable of forming a general eſtimate of the knowledge which the Babylonians and Egyptians might have of the mathematical ſciences. By conjectures, and by inferences drawn from what hiſtory has tranſmitted to us upon the monuments of Chaldea and Egypt, we may form a pretty juſt idea of the progreſs which the mathematics had made in theſe countries.

ARTICLE I.

Of the Babylonians.

IT is certain that the Babylonians were among the firſt who cultivated geometry, as is, I think, ſufficiently proved by the teſtimonies I have produced in the firſt part of this work [i]. What we read in ancient authors, of the immenſe works which had rendered Babylon one of the wonders of the world, cannot but give us very high ideas of the proficiency of its inhabitants in mechanics; and it is not poſſible to carry mechanics to a certain degree of perfection, without the help of geometry. This ſcience muſt therefore have been familiar to the Babylonians. To evince this, I ſhall take a review of ſome of the works executed by theſe people. I have already ſpoke of them in the preceding book; but I paſſed ſlightly over ſome of them, deſigning to treat of them more fully in this place, be-

* Thoſe of the Chineſe excepted, which are extremely confuſed, of no ancient date, and which give us no certain particulars relating to the early times. See at the end of this volume, our diſſertation upon the antiquities of the Egyptians, Babylonians, Chineſe, *&c.*

[i] Book 3. chap. 2.

cauſe

cauſe theſe works have a direct relation with the mathematics.

Babylonia, in the ages I am now ſpeaking of, enjoyed a very great fertility. An advantage, nevertheleſs, which they owed more to art than to nature. It rains but very ſeldom in theſe countries; and the lands being watered only by the Euphrates [k], that river, in former times, made them pay very dear for its favours. The ſnows of the mountains of Armenia, which always melt at the approaches of ſummer, never fail to cauſe the Euphrates to overflow its banks. Theſe violent floods laid, in the early times, all the lands of Babylon under water, during the months of June, July, and Auguſt [l]. To remedy theſe inundations, they drew two canals above that city, which carried off the overflow of waters into the Tigris before they reached Babylon [m], and in order to ſecure the country ſtill better, they thought of means to confine the Euphrates within its banks. To effect this, they built on each ſide of this river, a very high dyke, and of great extent, lined with bricks cemented with bitumen [n]. They carried their precaution ſtill further. The Euphrates might happen to ſwell ſo conſiderably as to ſurmount theſe dykes; with a view to prevent this diſorder, they had contrived all along them proper openings to give the water a free and neceſſary vent [o].

The Euphrates traverſed Babylon from north to ſouth. I have already given a deſcription of the bridge built over this river in the preceding book; and this bridge, if we

[k] Arrian. de expedit. Alex. l. 7. p. 454.

[l] Strabo, l. 16. p. 1075.; Plin. l. 5. ſect. 21. p. 264.

[m] Id. ibid.; Herodot. l. 1. n. 185.; Megaſthen. ex Abyden. apud Euſeb. præp. evang. l. 9. c. 41. p. 457. The principal of thoſe canals ſeems to have been the *Naharmalcha*, named by the Greeks Βασιλέως Ποταμὸς, the *Royal River*. See Strabo, l. 16. p. 1084. not. 2. This canal, which the ancients ſpeak of as an immenſe work, can now ſcarce be diſtinguiſhed from the other canals with which this country is interſected.

[n] Herod. l. 1. n. 185.; Q. Curt. l. 5. c. 1. p. 313.

[o] Q. Curt. *loco cit.* We ſee ſuch openings on the bank of the Loire. They are called *Diſchargers*.

believe

believe Herodotus, was not all. That hiſtorian pretends, that they had run a ſecret gallery beneath the bed of the Euphrates above 20 feet high, and 15 broad. It ſerved for a communication between the two palaces built facing each other, on the oppoſite ſides of the Euphrates [a].

Theſe works could not have been executed without firſt turning off the courſe of the Euphrates. They effected it, not only by making many drains from that river, but alſo by digging above Babylon an immenſe baſon to receive a part of its waters. When all the works which they had undertaken were finiſhed, they cauſed the Euphrates to reſume its ordinary bed; but the baſon of which I have been ſpeaking, was ſuffered to remain. It was lined throughout with ſtone, and communicated with the river by a canal [b]. This vaſt reſervoir was deſigned for two uſes. To receive a great part of the overflowing waters of the Euphrates in the time of inundations, and to preſerve them for the purpoſe of watering the grounds in convenient ſeaſons; for, by means of ſluices, they drew off, at all times, the quantity of water they judged neceſſary *. In a word, the lake of Babylon ſerved for the ſame uſes as the lake Mœris in Egypt. For the reſt, we cannot aſcertain the dimenſions of it; what we read in the ancients on the ſubject is greatly exaggerated, and they even differ from each other †.

The labours of the Babylonians to meliorate their country, were not limited to this ſingle enterpriſe. They had alſo contrived a number of other canals, and found the ſecret of

[a] L. 2. p. 121.

[b] Herod. l. 1. n. 193.; Strabo, l. 16. p. 1075.; Arrian. de expedit. Alex. l. 7. p. 454.

* This is what may be conjectured from the relation of Herodotus, l. 1. n. 186. See alſo Arrian de expedit. Alex. l. 7. p. 451.; Megaſthen. apud Euſeb. præp. evang. l. 9. cap. 41. p. 457. C.

† Herodotus, Megaſthenes, and Diodorus, are the only authors who have ſpoke of the extent and depth of the lake of Babylon. As to Herodotus, I take the text of this author to be interpolated and mutilated at the ſame time in the paſſage here in queſtion. For Megaſthenes and Diodorus, one of them gives the lake of Babylon above 50 leagues of circumference, and about 120 feet of depth; the other, adopting the ſame meaſure for the circumference, gives this lake only 35 feet of depth.

ſpreading the Euphrates through their lands, in the ſame manner as the Nile was formerly diſtributed in Egypt[i]. They even propoſed many advantages from digging theſe canals, independent of thoſe I have ſhown. In the firſt place, they ſought to diminiſh the impetuoſity of the Euphrates, by making that river take many turns; and in the ſecond, to render the acceſs to Babylon difficult by water[k].

All theſe enterpriſes do not permit us to doubt, but that the demonſtrative ſciences were pretty well cultivated amongſt the Babylonians. A people who had ſkill enough to level, to direct and reſtrain ſuch a river as the Euphrates, muſt have made ſome progreſs in geometry and mechanics. Let us add to this what I have ſaid of their aſtronomical diſcoveries. After theſe reflections, I think it will be difficult to refuſe the Babylonians a pretty extenſive knowledge of the mathematics.

ARTICLE II.

Of the Egyptians.

TO give ſome idea of the knowledge which the Egyptians had of mechanics and geometry, I ſhall employ the ſame method that I have juſt made uſe of in regard to the Babylonians. At this time, we can no longer judge of the progreſs which theſe people had made in the mathematics, by any thing but their undertakings and their monuments. But, theſe teſtimonies abundantly ſupply, as I have ſaid, all that we may have loſt of the writings of antiquity, as a little attention will convince us. In the preceding books, I have given account of the works which the Egyptians had undertaken and executed to fertiliſe their country, and draw all poſſible benefit from the Nile[l]. I have alſo ſpoke of their obeliſks, and above all of the py-

[i] Herod. l. 1. n. 193.; Strabo, l. 16. p. 1075.; Arrian. de expedit. Alex. l. 7. p. 451.

[k] Herod. *loco citat.* [l] See part 2. book 2. ch. 4.

ramids

ramids. The reader may recollect the details into which I entered upon the conſtruction of theſe grand works [m]. Theſe enterpriſes may, in my opinion, be cited as the cleareſt proof of the progreſs which the Egyptians had made in the mathematics. I do not ſpeak of their aſtronomical diſcoveries. The inference I might draw from them, is plain enough.

Yet ſome have attempted to diſpute theſe people the merit of having made any conſiderable progreſs in geometry, and ſome modern writers have even made uſe of this argument as a proof, that the aſtronomical ſkill of the Egyptians muſt have been but very indifferent [n]. But what have been the motives for an accuſation ſo unjuſt and ſo ill founded? They are the geometrical diſcoveries of which antiquity has given the honour to Thales and to Pythagoras [o]. Thales, ſay they, is the firſt who diſcovered that a triangle which has the diameter of a circle for its baſe, and whoſe ſides meet in the circumference, is neceſſarily rectangular [p]. He alſo found the ſecret of meaſuring the pyramids by the ſhadow of the ſun [q]. Pythagoras, ſay the ſame authors, firſt demonſtrated, that the ſquare of the hypothenuſe is equal to the ſquares of both the other ſides [r]. If theſe propoſitions, which, ſimple as they are, are notwithſtanding very eſſential and very important, were unknown to the Egyptians; what ought we to think, conclude the critics I am ſpeaking of, of the ſkill of theſe people in geometry [s]?

I own I am yet to conceive how it has been poſſible to interpret the facts juſt mentioned to the diſadvantage of the Egyptians. They appear to me, on the contrary, to prove, that geometry is indebted to this people for the diſcoveries

[m] See part 2. book 2. *et ſupra*, book 2. ch. 2. p. 63. *et ſeq.*

[n] Weidler, hiſt. aſtron. p. 64. n. 21.; Univerſal Hiſtory tranſlated from the Engliſh, t. 1. p. 396. 397.

[o] Id. ibid. [p] Diog. Laert. l. 5. ſegm. 27.

[q] Id. ibid. Plin. l. 36. ſect. 17.; Plut. t. 2. p. 147.

[r] Diog. Laert. l. 3. ſegm. 12. *et compiures alii.*

[s] Weidler, hiſt. aſtron. p. 64.

The authors of the Univerſal Hiſtory compoſed in England, t. 1. p. 39[illegible] &c.

in queſtion. In effect, is it not certain, by the unanimous teſtimony of antiquity, that Thales and Pythagoras acquired all their knowledge amongſt the Egyptians? Theſe two philoſophers had lived in Egypt a great number of years [t], and had contracted intimate friendſhips with the prieſts of this country. Pythagoras had even procured himſelf to be initiated [u], and had purchaſed this privilege by undergoing the neceſſary circumciſion [x]. The manner in which Diogenes Laertius expreſſes himſelf in regard to Thales particularly, does not permit us to doubt, that this philoſopher owed all he knew of mathematics to the Egyptians. This hiſtorian ſays in expreſs terms, that Thales had never any other maſters for the ſciences, than the prieſts of Egypt [y]; and he ſpecially names geometry [z]. I therefore take it as demonſtrated, that Thales and Pythagoras derived from the Egyptians, the knowledge of the geometrical theorems we have been ſpeaking of. If the writers of Greece and Rome have repreſented theſe two philoſophers as the firſt who diſcovered them, we muſt not ſuffer their expreſſions to lead us into a miſtake: all that is meant by them is, that Thales and Pythagoras were the firſt who publiſhed them in Greece; but the honour of them is inconteſtably due to the Egyptians.

In fine, how ſhall we perſuade ourſelves, that a people capable of raiſing ſuch monuments as Egypt preſents us at this day, ſhould have been guided by mere practice, deſtitute of principles and of the helps of geometry? Is it not evident, on the contrary, that they knew how to apply the mathematics to the various neceſſities of civil life? How could they have been able, without the help of geometry, to level almoſt all the continent of Egypt, to draw from the Nile, that multitude of canals with which their lands were formerly watered, to hew in the mountains thoſe obeliſks, and thoſe

[t] Plato.; Plut. t. 2. p. 875. E.; Jamblich. de vita Pythag. ſegm. 7. 8.; Minut. Felix, p. 111.; Clem. Alex. ſtrom. l. 1. p. 304.

[u] Jamblich. de vita Pythag. ſegm. 14.

[x] Clem. Alex. ſtrom. l. 1. p. 351.

[y] L. 1. ſegm. 27. [z] Ibid. ſegm. 24.

coloſſal ſtatues, the number of which is ſaid to be ſo conſiderable, to tranſport and rear them upon their baſes? I repeat it, geometry muſt have directed theſe grand operations, and the Egyptians certainly joined theory to practice. Without ſuch knowledge, mechanics can never reach a certain degree of perfection *.

In this place, I think it will not be amiſs to remark in what branch of the mathematical ſciences the ancients were perſuaded, each people particularly excelled; which we may eaſily know by the kind of ſcience they aſſigned to a nation by way of preference. They looked upon the Chaldeans as the inventors of aſtronomy; the Phœnicians, of arithmetic; the Egyptians, of geometry, and in general of the mathematics †. Of conſequence, the ancients were perſuaded, that each of theſe nations had carried the branch of the mathematical ſciences I have mentioned, to a higher degree of perfection than the others. We become very ſenſible, that this was the notion of the ancients when we read the life of Pythagoras wrote by Porphyrius. He ſays, that this philoſopher learned aſtronomy from the Chaldeans, arithmetic from the Phœnicians, and geometry from the Egyptians ‡. This choice is not made at random. He vouches the opinion of the ancients as to what branch of the ſciences each nation was thought particularly to excel in.

I cloſe this examination of the progreſs of the ancient

* It may perhaps be objected to me what I have ſaid above, book 2. c. 2. p. 73. not. *, on the ſubject of the Peruvians, who, without any knowledge of mechanics, executed ſome works at leaſt as conſiderable as thoſe of the Egyptians. To this I anſwer, that this example is not abſolutely concluſive againſt the Egyptians. In effect, independently of their edifices, hiſtory tells us, that the moſt ancient geometers of Greece had drawn from Egypt the firſt principles of their ſciences.—The example of the Chineſe may alſo be brought againſt me, and perhaps with more reaſon. They, when the Europeans became acquainted with them, had only the firſt elements of geometry, though they had ſtudied aſtronomy for a long time. But ſtill I anſwer, that theſe examples cannot be concluſive againſt the Egyptians, ſince the Greek hiſtorians acknowledge them for the inventors of geometry.

† Jamblich. de vita Pythag. c. 29. p. 134. & 135.; Porphyr. ibid. p. 8. & 9.; Julian. apud Cyrill. l. 5.

‡ In vita Pythag. p. 8. & 9.

ration;

nations in the demonſtrative ſciences, by a reflection on the characteriſtical difference of genius of the Greeks, and of the Orientals. The Aſſyrians, the Babylonians, the Phœnicians, and the Egyptians, owed only to themſelves the diſcoveries they made in the ſciences. Theſe people travelled little; neither does it appear, that they were poliſhed by colonies ſent from foreign countries. It was not thus with the Greeks; notwithſtanding their pride and their prejudice, they have been obliged to acknowledge, that they were indebted for all their knowledge to the Egyptians, to the Chaldeans, and to the Phœnicians. Greece, by the confeſſion of her beſt writers, had no other merit than that of perfecting the diſcoveries communicated to them by Aſia and by Egypt[a]. The Greeks then, and conſequently the Romans, owed all their lights to the very ſame people, whom, in ſucceeding ages, they had the ingratitude, not to ſay the inſolence, to call barbarians.

ARTICLE III.

Of the Greeks.

I Shall enter into no detail upon the ſtate of geometry amongſt the Greeks in the ages which employ us at preſent. I could not do it without repeating what I have already ſaid in the preceding article upon the diſcoveries attributed to Thales and Pythagoras. In effect, theſe two philoſophers were regarded in antiquity as the firſt who gave the Greeks ſome notions of geometry. We may therefore judge of the progreſs of that ſcience in Greece, by the diſcoveries with which antiquity has honoured Thales and Pythagoras.

It has been the ſame with the ſciences in Greece as with the arts. Amongſt the different nations compriſed under the general name of Greeks, thoſe who inhabited Aſia were the firſt amongſt whom the demonſtrative ſciences began to be perfected. Thales was of Ionia. We ſee alſo, that,

[a] Diod. l. 5. p. 376.

in the different countries of Aſia Minor, appeared the firſt and moſt illuſtrious writers who have merited the attention of poſterity. I have ſaid it already, Greece in Europe was poliſhed much later than Greece in Aſia. This is a fact which it is needleſs to prove.

CHAP. IV.

Geography.

I Have ſpoke, in the ſecond part of this work, of the progreſs which the conqueſts of Seſoſtris had occaſioned to be made in geography [a]. There we have ſeen, that this prince cauſed maps to be drawn of all the countries he paſſed through, and that he took care to diſperſe copies of them in many countries [c]. I proceeded to give an account of the maritime enterpriſes of the Phœnicians, of the voyage of the Argonauts to Colchis, of the expedition of the Greeks before Troy, and of ſome other facts which muſt certainly have greatly contributed to the progreſs of geography [f].

It appears, that this ſcience continued conſtantly during a certain time to enrich itſelf more and more. The ages we are now going through, were, proportion conſidered, very knowing in geography. We ſee, by the writings of Homer, that the Indies excepted, and ſome of the northern parts of Europe, this poet knew almoſt all the countries mentioned by ancient geographers [g]. He ſeems even not to have been ignorant, that the earth was ſurrounded by water on all ſides [h]. Without doubt, this opinion was in a great meaſure founded only on conjecture. Many travellers informed them, that having advanced towards different extremities of the globe, they always found them bounded by a ſea; and they concluded, that, in all appearance, it muſt

[c] Book 3. c. 2. art. 3. [f] Ibid. [g] See Ibid. book 4.
[h] See Strabo, l. 1. *init.* [i] See the Iliad, l. 18. v. 606. 607.

be

be the ſame on all other ſides * I ſhall allow, that Homer has ſpoke of the ocean in a manner very obſcure, often even contradictory and ridiculous: nevertheleſs, through all theſe clouds, we can diſcern, that in his time they believed our globe to be exactly ſurrounded by water.

We might alſo ſurmiſe, that this poet had ſome ideas, ſome confuſed notions of the temperature of the climates ſituated under the equator. The deſcription which he makes of the fruit-trees of the gardens of Alcinous, gives me room to propoſe this conjecture. Homer ſays, that theſe trees are never without fruit; that in the time that the firſt are ripening, new ones are forming. The pear ready for plucking, ſhows another juſt appearing. The pomegranate and the orange have already attained their perfection, at the ſame time we ſee others advancing towards it. The grape is puſhed off by another grape, and the falling fig gives place to another which follows it †. This picture is perfectly agreeable to the manner that trees produce their fruit under the equator. Is it a fiction purely poetical, or can it be founded upon the knowledge which Homer might have had of the reality of the fact he advances? I ſhould be pretty much inclined to the latter opinion.

They might have had ſome ideas of the temperature of the climates ſituated beneath the equator, before the age in which Homer compoſed the Odyſſey. I have ſaid, in the ſecond part of this work, that the Phœnicians had made eſtabliſhments on the weſtern coaſts of Africa, not long after the Trojan war ‡. As theſe people were very bold and extremely enterpriſing, nothing hinders us from believing that ſome of their navigators might have penetrated as far as under the line. Thus, even before the age of Homer, they might have been acquainted with the climates ſituated beneath the equator. It is eaſy, moreover, to indicate another ſource.

* Strabo himſelf could not affirm, that the earth was ſurrounded by water, but in the ſame manner, that is to ſay, by ſtrong conjectures ſupported by ſome relations which gave this opinion a kind of evidence.

† Odyſſ. l. 7. v. 117. &c. ‡ Book 4. ch. 2.

The ſcripture ſpeaks of the frequent voyages made by the fleets of Solomon to the land of Ophir and Tharſhiſh, under the conduct of the Phœnicians [l]. We are at this time greatly divided upon the ſituation of the countries deſigned by antiquity under theſe names: in effect, it is ſcarce poſſible to aſcertain it to demonſtration. All we know poſitively is, that theſe countries muſt have been at a good diſtance from Elath and from Ezion-geber, ports of the Red ſea, from whence the fleets of Solomon departed; they took three years to perform their voyage. We know, moreover, that they returned laden with gold and ſilver, gums, roſin, odoriferous woods, precious ſtones, elephant's teeth, and even apes and peacocks [m]. All theſe circumſtances lead me to preſume, that we ought to look for Ophir and Tharſhiſh in Africa. I ſhall therefore ſide with thoſe who place theſe countries in the kingdom of Sofala, on the eaſtern coaſt of Ethiopia: there we find all the different productions I have here mentioned. It appears, moreover, that this navigation muſt have been familiar to the Phœnicians from before the time of Solomon [n]. We are not ignorant, that to go from the Red ſea to Sofala, the line muſt be paſſed. Thus Homer, who was poſterior to Solomon by about an hundred years, may have been very well informed of the temperature of the climate ſituated under the equator.

Of all the facts I have hitherto ſpoke of, there are none more remarkable than the maritime enterpriſe executed by the orders of Nechos, King of Egypt, about the year 610 before J. C. This prince ſent from the borders of the Red ſea, a fleet conducted by the Phœnicians, with orders to keep always along the coaſt of Africa, to make the tour of them, and to return to Egypt, by entering the Mediterranean at the pillars of Hercules; that is to ſay, by the ſtraits of Cadiz or Gibraltar. He was obeyed. The Phœnicians, on coming out of the Red ſea, entered into the ſouthern ocean, and conſtantly followed the coaſts. When autumn was come, they landed, ſowed grain, waited the ripening, and having got in their harveſt they imbarked

[l] 1 Kings c. 9. v. 26. cap. 10. v. 11. 22.
[m] 1 Kings c. 10. v. 11. 22. [n] Ibid. c. 9. v. 27.

again. Theſe navigators employed two years in coaſting Africa in this manner, to arrive at the pillars of Hercules; arrived at this ſtrait, they paſſed it, entered the Mediterranean, and reached the mouths of the Nile the third year of their courſe [o].

Hiſtory furniſhes us with no further facts, which we can make uſe of with relation to geography. Let us now conſider the ſtate of that ſcience in its mathematical part, and try to diſcover the progreſs which may have been made in it in the ages which cloſe this laſt part of our work.

I think that what conſtitutes the eſſence and the ſcientifical part of geography was then little known. Aſtronomy and geometry furniſh lights which are neceſſary for that ſcience, and I doubt whether they as yet knew how to apply them to the purpoſe. They were acquainted with many countries by the relations of travellers; but they judged of their poſitions and of their reſpective diſtances in a very vague and uncertain manner; and they were by no means in a condition to determine them with any ſort of preciſion. The very ideas that they had of the figure of the earth, ſavour but too much of the ignorance of theſe little enlightened ages, in the mathematical part of geography. In the time of Homer they looked upon our globe as a flat ſurface, ſurrounded on all ſides with water [p]. I have already ſaid more than once, that this poet probably paſſed his life in different countries of Aſia Minor; and it cannot be denied that, for his time, he was very learned. His ideas of the figure of the earth might therefore be at that time the general opinion of the people of theſe countries. Even in the time of Herodotus this error was not yet well eradicated. He laughed at the authors, who, deſcribing the circuit of the earth, repreſented it round, as if, ſays he, they had turned it on a wheel. Theſe are his terms [q].

As to the Greeks of Europe, we do not find that, be-

[o] Herod. l. 4. n. 42.

[p] Iliad. l. 18. v. 606. 607.; Gemin. c. 13. p. 54.; Macrob. in ſomn. Scip. l. 2. c. 9. p. 151.

[q] L. 4. n. 36.

for

fore Anaximander, any one of them attempted to perfect geography by the aſſiſtance of aſtronomy and geometry. In effect, the diſciple of Thales paſſed for the firſt of the Greeks who had found the art of drawing maps [r]. But what ſhall we think of theſe geographical productions, if it be true, as is aſſured, that Anaximander imagined the earth to be made like a cylinder [s]? Pythagoras paſſed for the firſt who thought of dividing the terreſtrial globe into five zones in imitation of the celeſtial [t].

Be that as it will, the ignorance of the European Greeks in geography was extreme in all reſpects during many ages. They do not even appear to have known the diſcoveries made in the ancient voyages I have ſpoke of above. They were not abſolutely unknown to Homer; I think I have ſhown that ſome very ſenſible traces of them exiſted in his poems: but theſe notions did not penetrate or receive credit amongſt the Greeks of Europe till very late. The hiſtorical part of geography was much more defective amongſt them, in the ages poſterior to Homer, than in thoſe in which this great poet lived. The facts I am about to lay before my readers do not permit us to doubt of it. It is true, they are foreign to the epocha which I have preſcribed myſelf; but I hope to be pardoned this digreſſion, the rather as it will ſerve to prove how uncertain and imperfect was the knowledge of the ancients.

Herodotus, who was poſterior to Homer by at leaſt 400 years, did not believe that the ſea ſurrounded the earth. "I cannot help laughing," ſays he, "at thoſe who pre-"tend that the ocean flows round our continent. No "proof can be given of it [u]. I believe," adds he, "elſe-"where, that Homer had taken what he delivers about the "ocean, from ſome work of antiquity; but it was with-"out comprehending any thing of the matter, repeating "what he had read, without well underſtanding what he "he had read [x]."

[r] Strabo, l. 1. p. 13.

[s] Plat. t. 2. p. 895. D. Anaximenes, Leucippus, and Democritus had no juſter ideas of the figure of the terreſtrial globe. Ibid.

[t] Plut. ibid. p. 896. B. [u] L. 4. n. 8. 36. 45. [x] L. 2. n. 23.

The ſame Herodotus, ſpeaking of the voyage round Africa, undertaken by the order of Nechos, does all in his power to make the relation he had heard of it appear ſuſpicious. Thoſe circumſtances which at this time are the moſt capable of atteſting the truth of it, are by him regarded as fabulous. He could not, for example, imagine that theſe navigators had ſeen, as they ſaid, the ſun in a contrary poſition to that in which he is ſeen in Europe [y]. In general, the manner in which this author, otherwiſe ſo learned and ſo judicious, explains himſelf upon this voyage, gives us plainly enough to underſtand, that he comprehended neither the end nor direction of it [z]. Herodotus, however, was born in Aſia Minor; but, according to all appearances, he left it early, and paſſed his youth, and even the greateſt part of his life, in European Greece.

Let us produce proofs ſtill more aſtoniſhing of the incapacity of the European Greeks in geography, in the ages poſterior to Homer. At the time when Xerxes attempted to ſubdue Greece, there arrived in Europe deputies from Ionia, demanding aſſiſtance to deliver their country from the dominion of the Perſians. Theſe deputies went to Ægina, where the naval forces of Greece were then aſſembled. They laid open the ſubject of their embaſſy, and prayed, that the fleet might advance towards Ionia: but their demand was rejected. The Greeks never dared to paſs the iſland of Delos. They were hindered by two reaſons: Firſt, they were ignorant of the courſe they were to hold beyond Delos to reach Ionia. In the ſecond place, they were afraid of undertaking ſuch a voyage, being perſuaded that it was as far from Ægina to Samos, as from Ægina to the pillars of Hercules [a]. This laſt motive ſhows

[y] L. 4. n. 42. The Phœnicians affirmed, that, in one part of their courſe, they had ſeen the ſun on their right. To underſtand how that circumſtance could ſhock Herodotus, it muſt be known that the ancients call the weſt the fore part; the eaſt the hinder part; the north the right, and the ſouth the left of the world. Their reaſon for this was, that the apparent motion of the heavens being from eaſt to weſt, the weſt was of conſequence taken for the foremoſt part of the world.

[z] See l. 4. n. 42. [a] Herod. l. 8. n. 132.

how

how groſsly ignorant they were in geography; and we muſt obſerve, that in this fleet was aſſembled the flower of all the maritime forces of European Greece.

It is not to be doubted but the Greeks, in ſucceeding times, applied themſelves to acquire more juſt and exact notions of the poſition and reſpective diſtances of places. Geography was certainly improved, particularly after the conqueſts of Alexander. But in former times all the knowledge with which this ſcience could enrich itſelf, was ſtill imperfect. In the flouriſhings days of Greece and Rome, that is to ſay, in ages which in many reſpects may be looked upon as very enlightened, all that was known of the earth, took up upon the maps a ſpace twice as long as broad [b]; becauſe they had no idea of the countries ſituated beyond the line. The ſpace I ſpeak of comprehended about two thirds of Europe, one third of Africa, and nearly a fourth of Aſia. At that time therefore they knew only that part of the earth which lies beneath the northern temperate zone, and they were ſtill far enough from knowing exactly all the countries ſituated beneath that zone.

As to the ideas which the learned had formed of the reſt of our globe, they were very little rational. Moſt of them were perſuaded, that of the five zones only two were habitable; the exceſſive cold on one hand, and the extreme heat on the other, rendering it impoſſible, as they imagined, to inhabit the other three *. Beſides, it was only by reaſoning, and by the knowledge they had of the figure of the earth, that the philoſophers of whom I ſpeak, ſuppoſed that the ſouthern temperate zone might be habitable. They knew that zone to be at the ſame diſtance

[b] Geminus, c. 13. p. 52.

* Without a paſſage of Plutarch, t. 2. p. 896. and one of Geminus, c. 13. we might boldly affirm that this was the general opinion of the ancients; but Pythagoras, according to Plutarch, thought that the torrid zone might be inhabitable. By the by, the reaſon which this philoſopher gave for thinking ſo, proves clearly the extreme ignorance of thoſe times in phyſics and geography. We ſee plainly that the ancients ſpoke of thoſe matters at random, and without any ſort of principles or knowledge.

from

from the equator, as that which they inhabited, and conſequently that the temperature of the air ought to be nearly equal. They concluded, that one of theſe zones being inhabited, the other might be ſo too; but further they had no certainty that it was ſo. For far from having any commerce with the people of thoſe countries, they did not even think it was poſſible to have any. "When we ſpeak," ſays Geminus, "of the inhabi-"tants of the ſouthern zone, it is not as knowing that "zone to be inhabited. We only believe that it may "ſo: but further we have no poſitive aſſurances of it [b]." Cicero was not much better informed. "Behold," he makes Scipio ſay, "behold the earth as ſurrounded with "five zones, of which only two are inhabited; that in "the middle being continually ſcorched with the heat of "the ſun, while it perpetually freezes beneath the two "laſt. Again, men who inhabit the ſouthern tempe-"rate zone, are a ſpecies that has nothing in common with "ours [d]."

Pliny, ſpeaking of the two temperate zones, ſays poſitively, that there can be no communication between their inhabitants, becauſe of the exceſſive heat which burns that which ſeparates them [e]. Macrobius, in fine, entering more at large into this ſubject, aſſures us, that the people of the two temperate zones have never had commerce together, and that it is even impoſſible that they ſhould ever have any, on account of the obſtacles ariſing from the terrible heats of the torrid zone [f]. They therefore admitted inhabitants in the ſouthern temperate zone, only by conjecture and mere probability, much about the ſame manner as certain philoſophers have ſuppoſed them in the moon [g].

[a] Geminus, c. 13. p. 50. Geminus lived in the times of Sylla and of Cicero. See alſo Hygin. poet. aſtron. c. 8. p. 355.

[b] In ſomn. Scip. n. 6. t. 3. p. 417. See alſo Hygin. poet. aſtron. l. 1. c. 8.; Lucret. l. 5. v. 205. 206.

[c] L. 2. ſect. 68. p. 107.

[d] In ſomn. Scip. l. 2. c. 5. p. 135. & 137.; Hygin. *loco cit.* p. 355.; Diod. t. 1. p. 49.

[e] See *ſupra*, c. 2. art. 2. p. 108. & 109.

A very ſtriking proof of the imperfection in which certain parts of the ſciences remained ſo long a time, is to ſee antiquity continue almoſt generally in that opinion, after what we ſtill find in hiſtory at this day of the different voyages made round Africa. For, independent of that which the Phœnicians undertook by order of Nechos, we know, that not many ages after the reign of this prince, Xerxes charged a Perſian of diſtinction with a like commiſſion. This navigator, it is true, did not advance ſo far as the Phœnicians I have ſpoke of. But the leaſt reſult of his expedition muſt have been indications of inhabitants in the ſouthern temperate zone. He affirmed poſitively, that he had ſeen of them [h].

Still more recent was the voyage of Hanno, an experienced navigator, whom the Carthaginians ſent to diſcover the weſtern coaſt of Africa. His relation exiſts at this day, and informs us, that this captain had penetrated at leaſt as far as the fifth degree of north latitude [i]. The hiſtory of that enterpriſe, publiſhed originally in the Punic language, was afterwards tranſlated into Greek, and in that ſtate has been handed down to us. We know how familiar the Greek was to the authors I have juſt ſpoke of. By what fatality then have the ancients made no uſe of theſe diſcoveries? and why do they ſeem to have fallen into oblivion almoſt as ſoon as born?

As to what more particularly regards the ſuperficies of our globe, I mean the exact and reſpective ſituation of the ſeas, the continents, and iſlands; the ignorance of the ancients was great upon all theſe heads. Wanting proper machines and aſtronomical inſtruments, they could not attain the exact knowledge which we are now in poſſeſſion of. They could not make the obſervations which are the baſis and foundation of them. Theſe important diſcoveries were reſerved for the ages in which we live. In leſs than fifty years, geography has more enriched itſelf, than in a ſpace of near five thouſand.

[h] Herod. l. 4. n. 43.

[i] See les mem. de l'acad. des inſcript.

BOOK IV.

Of Commerce and Navigation.

THE epocha we are now going through, ought to be regarded as one of thoſe which have been the moſt favourable to commerce and navigation. The ages which cloſe this laſt part of our work, are the ſhining ages of Tyre. The Phœnicians themſelves were not the only people amongſt whom maritime traffic was then ſeen to flouriſh. It was held in equal honour amongſt many other nations. I have touched a little upon it in the preceding book, giving account of the progreſs of geography. The facts, of which it remains to ſpeak, will confirm the ideas which my readers may have already formed of the picture they are about to be preſented with by the ages which at preſent engage our attention. I ſhall unite in one and the ſame point of view, all I have to ſay in this laſt part, upon the ſtate of commerce and navigation, relative to the different nations who have applied themſelves to them. It is not poſſible at this time to divide theſe two objects, and treat them ſeparately.

CHAP. I.

Of the Egyptians.

WE have ſeen in the preceding books, the averſion which the Egyptians had originally for the ſea, and the little eſteem they had for commerce *. I have

* Part 1. book 4.

taken

taken care to obſerve, that though Seſoſtris forgot nothing to make them alter this way of thinking, he was not however able to deſtroy it entirely [b]. The firſt monarchs who ſucceeded this prince, either neglected commerce, or failed to make their ſubjects reliſh it. For a long ſeries of ages we do not find any mention made of the commerce of the Egyptians: only as we find in the ſacred books, that, in the time of Solomon, many horſes were brought from Egypt for the ſervice of that prince [c], we may conclude that there may have been ſome direct traffic between the Egyptians and the Iſraelites. But we may equally ſuppoſe, that this commerce was carried on by the intervention of third hands. We learn from the poems of Homer, and from the writings of Herodotus, that the Phœnicians kept up a continued correſpondence with the Egyptians, and that there was a regulated commerce very anciently eſtabliſhed amongſt theſe nations [d]; a commerce often ſpoke of in ſcripture [e]. The Phœnicians were a long time the only nation to whom the ports of Egypt were open [f]. Perhaps it was by this way that Solomon drew his horſes from Egypt. However that may be, it is not likely that the Egyptians went themſelves to traffic on the coaſts of Judea. They never quitted their own country. That nation acted formerly as moſt of the Aſiatic nations now act, who wait till the Europeans come, and fetch their merchandiſes, and ſupply them with what they may want.

The Egyptians were in general ſo little jealous of commerce, that they abandoned that of the Red ſea to all the people who had a mind to exerciſe it. They permitted the Phœnicians, the Idumeans, the Iſraelites, and the Syrians, to have fleets there ſucceſſively [g]. It is equally certain, that, for a long courſe of ages, the Egyptians maintained neither merchant fleets nor naval forces.

[b] Part 2. book 4. [c] 1 Kings, c. 10. v. 28. 29.
[d] Odyſſ. l. 14. v. 288. &c.; Herod. l. 1. n. 1.
[e] See Iſaiah, c. 23. v. 3.; Ezekiel, c. 27. v. 7.
[f] See part 1. book 4.
[g] See Prideaux, hiſt. des Juifs, t. 1. p. 9. 12. 15. 16. 17.

About the latter times of the Egyptian monarchy, the ſovereigns who mounted the throne, at length opened their eyes upon the importance and advantages of commerce. Bocchoris, who reigned about the year 670 before J. C. publiſhed very wiſe laws relating to this object [h]. His ſucceſſors imitated him. The hiſtorians of antiquity aſcribe to the laſt monarchs of Egypt, the regulations concerning the trade and commerce of that empire [i].

It was alſo in the reign of theſe princes that the ancient maxims of the Egyptians were aboliſhed, in regard to ſtrangers, who had always been prohibited acceſs to Egypt. Pſammetichus, who occupied the throne about 100 years after Bocchoris, opened the ports of his kingdom to foreign nations. He gave a favourable reception particularly to the Greeks, and permitted many amongſt them to form ſettlements upon the coaſts of Egypt [k].

Nechos, ſon and ſucceſſor to this prince, took it ſingularly to heart, to cauſe commerce and navigation to flouriſh in his dominions. With this view, he undertook to join the Mediterranean to the Red ſea, by a canal which went from the Nile. This project, already attempted in vain by Seſoſtris [l], was not more ſucceſsful under the reign of Nechos. He was obliged to abandon it [m]; but this deſign ſhows at leaſt the deſire which this monarch had to facilitate and extend maritime commerce in his kingdom.

Nechos having renounced the enterpriſe I have been ſpeaking of, turned all his attention to the marine. He cauſed a number of ſhips to be built, ſome upon the Mediterranean, and others upon the Red ſea [n]. His intention was to acquire an exact knowledge, not only of thoſe ſeas, but alſo of that of the Indies. This monarch conceived projects ſtill more vaſt. It was, in effect, by his orders, that the Phœnicians undertook the voyage round Africa,

[h] Diod. l. 1. p. 90. 106.
[i] Ibid. p. 78.
[k] Herod. l. 2. n. 154.; Diod. l. 1. p. 78.
[l] See part 2. book 2.
[m] Herod. l. 2. n. 158.
[n] Id. ibid.

of

of which I have ſpoke in the preceding books [o], and which I ſhall again have occaſion to reſume.

From that epocha, the Egyptian monarchs continued to employ themſelves greatly on the marine. They built fleets, and endeavoured to train their ſubjects to the ſea: nor were their cares and labours employed in vain. In the reign of Apries, grandſon of Nechos, the Egyptians found themſelves ſtrong enough, and of ſufficient experience at ſea, to give battle to the Phœnicians, and defeat them [p]. This fact is the cleareſt proof that can be cited of the progreſs which theſe people had then made in navigation, and of the degree of ſuperiority which the naval forces of Egypt had acquired in ſo ſhort a time.

Apries was ſucceeded by Amaſis. This prince, who ſhould be regarded as the laſt monarch of ancient Egypt, entered into all the views of his predeceſſors, and ſeconded them perfectly, by favouring commerce with all his power, and attracting ſtrangers into Egypt by his benefactions [q]. If that monarchy had ſubſiſted a longer time, it is to be preſumed, that commerce and navigation would have made a great progreſs. The Egyptians would at length have availed themſelves of the advantages of their ſituation. In effect, there are few countries in the univerſe ſo happily placed as Egypt with regard to commerce. Equally in reach of the Red ſea and of the Mediterranean, deſtined, ſo to ſpeak, to ſerve as a centre of union to Aſia, Africa, and Europe; ſhe is capable of attracting and embracing the commerce of all theſe different parts of the world. But the ancient monarchy of the Egyptians drew to an end, at the time when theſe people began to perceive their advantages. They were therefore unable to profit by them.

The Egyptians, moreover, had carried into their marine and their trade, that ſpirit of ſingularity which always characteriſed the nation. Their ſhips were built and armed

[o] *Supra*, book 2. & book 3. p. 137.
[p] Herod. l. 2. n. 161.; Diod. l. 1. p. 79.
[q] Herod. l. 2. n. 178.

in a particular manner abſolutely different from that obſerved by other nations, and their rigging and cordage diſpoſed in a faſhion that appeared very ſingular and fantaſtical [r]. As to trade; I have already ſaid, that the men diſdained to meddle with it; all the traffic paſſed through the hands of women [s].

This is all we are able to ſay of the ſtate of commerce and navigation amongſt the ancient Egyptians. We have not the lights and informations neceſſary to treat of theſe two objects. We are ignorant, for example, what were the particular objects of the traffic of the Egyptians, and of their manner of exerciſing trade, and we are no better inſtructed in the form and value of their coins. Scarce are we able to form any conjectures on this laſt article *. I ſhall finiſh with obſerving, that as the Egyptians applied themſelves ſeriouſly to commerce only towards the decline of their monarchy, theſe people, in all probability, had not time to become acquainted with all its branches, or to underſtand all the ſprings of a machine, ſo complicated, ſo vaſt, and ſo difficult to comprehend.

CHAP. II.

Of the Phœnicians.

WHatever idea I may have given before of the commerce and wealth of the Phœnicians, it is nothing in compariſon of that which we are to form of them in the ages we are now going through. Theſe people were then maſters of all the commerce carried on in the known world.

[r] Herod. l. 2. n. 36. [s] Part 1. book 6. c. 2.

* There is only room to preſume, that very anciently the Egyptians made uſe of for commerce, amongſt other pieces of metal, leaves of gold, very light, and bearing on one ſide the impreſſion of a ſort of roſe leaf. See le Recuell d' antiquités de M. le Comte de Caylus, t. 2. p. 18.; & les mem. de Trev. Mai 1756, p. 1253. &c.

The

The empire of the ſea was in their hands; an empire which they had particularly merited by their ſkill and experience in navigation. We ſee, in effect, that the Phœnicians were the people to whom other nations always applied when any great maritime enterpriſe was to be undertaken. The fleets which Solomon ſent to the country of Ophir, were conducted by the Phœnicians [t]; and it was the navigators of that nation whom Nechos charged with making the tour of Africa [u]; an expedition, which, the times conſidered, demanded great courage, and very ſuperior talents.

Hitherto, that is to ſay, in the firſt and ſecond part of this work, I have ſpoke only of Sidon. I repreſented it as the moſt conſiderable and the moſt opulent of all the cities then known in Phœnicia. But in the ages which at preſent fix our attention, that ancient capital was outſhone by its colony of Tyre. The writers of antiquity are divided upon the epocha of the foundation of that city. Without entering into all the diſcuſſions we ſhould be drawn into by an exact examination of their opinions, it ſuffices to obſerve, that, in the time of Homer, Tyre was as yet ſo little famous, that he does not even mention its name. Sidon only is taken notice of in the writings of this great poet [x]. Tyre, nevertheleſs, was not long of riſing into fame. We ſee, that, ſoon after the time of Homer, that city not only equalled, but even ſurpaſſed Sidon. Iſaiah, Jeremiah, Ezekiel, and the other prophets repreſent Tyre as the city of the greateſt trade and wealth that had ever been in the univerſe *. Its inhabitants joined military ſkill and bravery to the intelligence and activity neceſſary for maritime traffic. . . . .

Many cities dependent upon Tyre, having undertaken to throw off her dominion, they had recourſe to Salmanaſar King of Aſſyria. That monarch eſpouſed their inter-

[t] 1 Kings c. 9. v. 29.; 2 Chron. c. 8. v. 18.
[u] *Supra*, book 3. p. 137. [x] See part 2. book 4. c. 2.
* Iſaiah propheſied under the reign of Achaz, about the year 740 before J. C.

eſts,

eſts, and declared war againſt the Tyrians. He equipped a fleet of 60 ſail; but that armament was beaten by a Tyrian ſquadron, conſiſting of only 12 ſhips. This action rendered the Tyrians ſo formidable at ſea, that Salmanaſar durſt no more encounter them on that element. He judged it more advantageous to attack them by land, and therefore formed the ſiege of Tyre, which he afterwards converted into a blockade. The place was ſoon reduced to grievous extremity, becauſe the Aſſyrians had ſtopped up the aqueducts, and intercepted all the conduits, by which they could receive water. To remedy this inconvenience, the Tyrians fell to digging wells, and that expedient ſucceeded ſo well, as to enable them to hold out five years. Salmanaſar then happening to die, the Aſſyrians raiſed the ſiege, and Tyre for that time eſcaped the imminent danger which threatened her [y]. This event happpened about the year 720 before J. C.

From that epocha, till the reign of Nebuchadnezzar, Tyre ſaw her commerce and her ſplendor continually increaſe. To give, in a few words, an idea of that city, and to ſhow how great was its wealth, and how extenſive its trade, I cannot do better than tranſcribe the expreſſions the prophet Ezekiel has made uſe of to deſcribe and characteriſe Tyre in the days of her proſperity *.

"O Tyre," exclaims the prophet, "thou haſt ſaid in "thyſelf, I am a city of perfect beauty. Thy neighbours "who built thee, have forgot nothing to embelliſh thee. "They have made the hull, and the diverſe ſtories of thy "ſhips, of the fir-trees of Senir. They have taken a cedar "from Lebanon, to make thee a maſt. They have po- "liſhed the oaks of Baſhan, to make thine oars. They "have employed the ivory of the Indies, to make benches "for thy rowers; and that which comes from Italy, to "make thy chambers. Fine linen, with broidered work "from Egypt, was that which thou ſpreadeſt forth to be

[y] Menander apud Joſeph. antiq. l. 9. c. 14.

* Ezekiel propheſied about the year 595 before J. C.

"thy

" thy ſail. Hyacinth and purple from the iſles of Eliſhah,
" have made thy flag. The inhabitants of Sidon and Ar-
" vad were thy rowers; and thy wiſe men, O Tyre, be-
" came thy pilots. All the ſhips of the ſea, and all their
" mariners occupied thy commerce and thy merchandiſe.
" The Carthaginians trafficked with thee, and filled thy
" fairs with ſilver, with tin, and lead. Javan, Tubal, and
" Meſhech, were alſo thy merchants, and brought to thy
" people ſlaves and veſſels of braſs. They of Togormah
" traded in thy fairs with horſes and mules. The children
" of Dedan trafficked with thee. Thy commerce extend-
" ed to many iſlands, and they gave thee in exchange for
" thy merchandiſes, magnificent carpets, ivory, and ebony.
" The Syrians were thy merchants, becauſe of the multi-
" tude of thy works: they expoſed to ſale in thy fairs
" pearls, and purple, embroidered works of byſſus, ſilk, and
" all ſorts of precious merchandiſe. The people of Judah
" and of Iſrael were alſo thy merchants, they traded in
" thy markets pure wheat and balm, honey, oil, and roſin.
" Damaſcus, in exchange for thy wares, ſo varied and ſo
" different, brought thee great riches, excellent wine, and
" wool of a lively and ſhining colour. Dan, Greece, and
" Moſel traded in thy markets, iron works, and myrrh,
" and calamus. Arabia, and the princes of Kedar were alſo
" thy merchants; they brought thee their lambs, and rams,
" and goats. Shebah and Raamah came alſo to traffic with
" thee; they traded in thy markets the moſt exquiſite per-
" fumes, precious ſtones, and gold. Thine were the moſt
" remarkable of all the ſhips of the ſea. Thy rowers
" conducted thee upon the great waters. Thou haſt been
" loaded with riches and glory: never any city was like
" thee. Thy commerce enriched the nations, and the
" kings of the earth [z]."

We ſee by this lively and animated picture, that the commerce of Tyre had then no other bounds than thoſe of the known world. That city was the centre where all met.

[z] Chap. 27. & 28.

In

In this reſpect, profane hiſtorians perfectly agree with the ſacred books [a].

All this ſo great proſperity was ended by the moſt horrible cataſtrophe. Nebuchadnezzar, ſovereign of Babylon, marched againſt Tyre, the year 580 before J. C. The motives which determined him to that enterpriſe are unknown to us. The Tyrians oppoſed a vigorous reſiſtance to the efforts of the Babylonian monarch, but the event was not favourable to them. Nebuchadnezzar made himſelf maſter of their capital, but not indeed without great trouble and much fatigue, for he remained thirteen years incamped before the walls of Tyre [b]. That expedition was ſo long and ſo toilſome, that *every head*, to make uſe of the prophet's expreſſion, *was made bald, and every ſhoulder was peeled* [c]. The length of the ſiege had permitted the greateſt part of the inhabitants to retire with their beſt effects into an iſland very near the ſhore on which Tyre was built [d]. The conqueror having entered the place, found ſcarce any thing which he could abandon to his troops to recompenſe them for the toils and labours they had undergone [e]. He was ſo enraged at it, that, putting all to the havock, he deſtroyed the town to its foundations, and put to the ſword all the inhabitants that remained. Thus periſhed ancient Tyre, 567 years before J. C. and from the time of this diſaſter ſhe never more aroſe. The name and the glory of that city were transferred to the New Tyre, which was built on an iſland ſituated oppoſite to the Old [f].

I think I ought not to cloſe this article without ſaying a word of the Carthaginians. They hold too conſiderable a rank amongſt the nations which formerly diſtinguiſhed themſelves by maritime traffic, for us to paſs them over in ſilence. Theſe people are as well known by their ſkill

[a] See Q. Curt. l. 4. c. 4. p. 159.; Strabo, l. 16. p. 1097.
[b] Joſeph. antiq. l. 10. c. 11. *ſub. fin*; Adverſ. Appion. l. 1. c. 7.
[c] Ezekiel, c. 29. v. 18. [d] Marſham, p. 539.
[e] Ezekiel, c. 26. v. 11. & 12. c. 27. v. 36.
[f] See Marſham, p. 539.

and

and experience in commerce and navigation, as by the long and bloody wars which they had to maintain againſt the Romans.

Carthage, ſaid to be founded about the year 890 before J. C. owed its birth to the ancient Tyre [g]. The firſt form of government eſtabliſhed at Carthage was certainly monarchical; but that conſtitution did not ſubſiſt long. Every thing leads us to believe that Carthage very ſoon formed itſelf into a republic [h]. However that may be, this Phœnician colony maintained in its new eſtabliſhment the taſte and induſtry of its founders. Commerce was, properly ſpeaking, the ſoul of Carthage, her occupation, her diſtinguiſhing and ruling character, the object, in a word, of all her meaſures, as well public as private. The moſt eminent perſonages in the ſtate did not think it below them to be concerned in trade [i], but applied themſelves to it with as much ardor and attention as the loweſt citizens. Traffic gave birth to Carthage; traffic gave her growth, and placed her in a condition to diſpute with Rome for many ages, the empire of the world.

Carthage was more advantageouſly ſituated than Tyre: placed in the centre of the Mediterranean, in reach of the eaſt as of the weſt, ſhe embraced, by the extent of her commerce, all the ſeas, and all the countries then known. An excellent port offered the ſecureſt aſylum to ſhips. The coaſts of Africa, a vaſt and fertile region, furniſhed in abundance all things neceſſary to ſubſiſt an innumerable people. With ſuch advantages, joined to the genius for trade and navigation which they had brought from Phœnicia, they very ſoon attained the rendering theirs a moſt flouriſhing ſtate. Happy, had they not ſuffered themſelves to be drawn away by a ſpirit of conqueſt and dominion; a paſſion always fatal and ruinous to trading nations.

The hiſtory of Carthage does not furniſh us, beſides, with any thing particular on the object which at preſent occu-

[g] Marſh. p. 398. [h] See Ariſt. de repub. l. 2. c. 11.
[i] Ariſt. *loco cit.* p. 335.; Polyb. l. 6. c. 9.

pies us. All that we have read in the preceding volumes, on the commerce and the marine of the Phœnicians, agrees equally with the commerce and marine of the Carthaginians. In that reſpect, I find no difference between one people and the other. We may add, that they were both equally decried for their bad faith, and perhaps very unjuſtly. We are acquainted with the Phœnicians and the Carthaginians only from reports that are very ſuſpicious. To judge impartially of the character of theſe two nations, we ſhould have had left us ſome hiſtory of Phœnicia or of Carthage, wrote by a Phœnician or a Carthaginian: we ſhould then have been able to compare the different relations, and by that means to diſcover the truth.

CHAP. III.

Of the Greeks.

WE ought to refer to the epocha that employs us at preſent, that of the origin of commerce and navigation amongſt the Greeks. Thucydides obſerves, that theſe people did not begin to apply themſelves ſeriouſly to commerce till after the war of Troy[a]. They gave themſelves up to it with ſo much the more ardor, as, their country being naturally poor and barren, a briſk and extenſive commerce could alone procure them that conſideration and opulence which render a nation powerful and reſpectable.

The hiſtory of commerce and navigation amongſt the Greeks in the ages which now fix our attention, does not however preſent us with objects as yet very ſatisfactory. We ſee indeed ſome cities of Greece, as well Aſiatic as European, begin to addict themſelves to maritime traffic. But theſe firſt attempts were very feeble. The Greeks were then neither induſtrious enough, nor ſufficiently intelligent,

[a] L. 1. p. 11.

telligent, to eſtabliſh a great commerce. The arts and ſciences had not as yet acquired any degree of perfection in Greece, as I think I have ſufficiently proved in the preceding books. Accordingly we ſee, that gold and ſilver were very ſcarce, even towards the end of the ages which make the object of this laſt part of our work.

As to the ſkill and experience of the Greeks in the marine, we may judge of it by a ſimple reflection. It is certain, that theſe people never knew any other obſervation to direct the courſe of their ſhips, than that of the Greater Bear [1]. This ſingle fact is a proof of their ignorance and incapacity. Let us add to this, what we have ſeen elſewhere, that, in the time of Xerxes, the Greeks ſtill believed that it was as far from Ægina to Samos, as from Ægina to the pillars of Hercules; and they knew not what courſe to hold, after paſſing the iſle of Delos to arrive in Ionia [m].

As to the force and burthen of their ſhips, I have ſpoke amply of them in the ſecond part of this work. There my readers have ſeen that theſe veſſels were very weak and very indifferent. Their marine in that reſpect had made no progreſs. Indeed, what idea can we form of them when we ſee that in the Peloponneſian war the Lacedæmonians tranſported their ſhips by land from one ſea to the other [n]. It even appears that this expedient was then in common uſe, and frequent enough [o]. After theſe facts my readers muſt not expect to reap much pleaſure or ſatisfaction from the relation I am about to make of the ſtate of commerce and navigation amongſt the Greeks, in the ages which at preſent engage our attention. I ſhall run through the hiſtory of the principal cities of Greece which were then diſtinguiſhed for them, ſuccinctly and according to chronological order.

[1] Arat. phænom. v. 40. &c.; Ovid. faſt. l. 3. v. 107.; Triſt. l. 4. Eleg. 3. *init.*

[m] *Supra*, book 3. chap. 4. p. 140. [n] Thucyd. l. 3. n. 81.

[o] See Strabo, l. 8. p. 516.

The inhabitants of the iſland of Ægina may be regarded as the firſt people of Greece in Europe, who became conſiderable for their intelligence in maritime traffic. We ſee in effect, that, ſoon after the return of the Heraclidæ into Peloponneſus, the Æginetes had great commerce in Greece. They diſimbarked at Cyllene, and after that made uſe of mules to tranſport their merchandiſe to the interior parts of the country [p]. It was alſo about theſe ages that this people thought of coining gold and ſilver into ſtrong and heavy pieces of money [q]. If we believe ſome authors, they were the firſt amongſt the Greeks who brought coined ſpecie into uſe [r].

The Æginetes had attained the rendering their iſland the centre of all the commerce of Greece [s], only by keeping up conſiderable naval forces. It may be ſaid, that, in the ages I now ſpeak of, they were regarded as the greateſt maritime power in Greece [t]. The Æginetes are even placed in the number of the nations who held the empire of the ſea for a long time [u]. Nevertheleſs, they could not maintain themſelves in that ſtate of opulence and proſperity. The ſcene which this people acted in Greece, was as ſhort as it was brilliant. Driven from their iſland by the Athenians, in the time of Pericles, the Æginetes could never recover that blow [x]. Their naval power was annihilated, and their commerce brought very low.

The Corinthians deſerve the next place after the Æginetes. They were very early diſtinguiſhed for their riches and their maritime force. It were difficult to find a city placed more favourably for commerce than was that of Corinth. Situated upon that neck of land which joins Peloponneſus to the continent of Greece at an almoſt e-

[p] Pauſan. l. 8. c. 5.

[q] Pollux, l. 9. c. 6. p. 1067.; Heſychius, *vocat.* Αἰγινητῶν νόμισμα.

[r] Marm. Oxon. epoch. 29.; Ælian. var. hiſt. l. 12. c. 10.; Strabo, l. 8. p. 576.

[s] See Strabo, ibid.

[t] See Herod. l. 5. n. 83.; Plut in Themiſt. p. 113.; Pauſ. l. 2. c. 29.

[u] Strabo, l. 8. p. 576.; Ælian. var. hiſt. l. 12. c. 10.; Euſeb. chron. l. 2. p. 1514. p. 129.

[x] See Pezron, not. ad Ælian. l. 12. chap. 10.

qual

qual diſtance from the two ſeas, that city ſeemed deſtined by nature to ſerve as a ſtaple to all the people of theſe countries. The Greeks anciently traded more by land than by ſea [y], and then all the commerce neceſſarily paſſed through the hands of the Corinthians. By this means, in ancient times, they amaſſed great wealth. Accordingly we ſee the ancient poets of Greece frequently give Corinth the epithet of opulent [z].

That city contained within its diſtrict two ports, one ſituated on the *Sinus Saronicus*, the other on the gulf called from Corinth *Corinthiacus Sinus*. The Corinthians knew how to avail themſelves of the advantages of their poſition. They addicted themſelves to navigation, equipped ſhips, ſoon after the Trojan war, to give chace to pirates, and protect commerce [a]. By this means Corinth was not long of becoming the ſtaple of all the merchandiſes conſumed in Greece [b]. Succeſs encouraged her inhabitants, the art of perfecting navigation was the object of their ſtudy. They are ſaid to be the firſt who changed the form of the ancient ſhips. Inſtead of ſimple galleys, the Corinthians built veſſels of three ranks of oars [c]. That invention muſt have procured them, for ſome time, a kind of ſuperiority at ſea. However, we do not find that the Corinthians are reckoned in the number of the nations who have held the empire of that element. There is mention only in Thucydides, of a memorable action between theſe people and the inhabitants of Corfou [d], about the year 660 before Jeſus Chriſt. This was the moſt ancient naval combat that is ſpoke of in the chronicles of Greece [e].

The poſition of Corinth was ſuch, that that city might eaſily have given law to all the Greeks. Commanding two ſeas, and upon the iſthmus that divides them, it had been eaſy for them to have hindered one half of Greece from communicating with the other. But the genius and inclination of the Corinthians led them rather to commerce than to mi-

[y] Thucyd. l. 1. p. 12.; Strabo, l. 8. p. 580.
[z] Hom. Iliad. l. 2. β. v. 77.; Thucyd. l. 1. p. 12.
[a] Thucyd. *loco cit.* [b] Id. ibid. [c] Ibid. [d] Ibid. [e] Ibid.

litary

litary enterpriſes. Satisfied with amaſſing great wealth, they took care for nothing but the means of enjoying it, and abandoned themſelves to all the luxury and all the delicacy which their opulence afforded them. They applied themſelves alſo to render their city one of the moſt beautiful and magnificent of Greece, and ſpared nothing to accompliſh it. Corinth was filled with temples, palaces, theatres, porticoes, and a number of other edifices as commendable for the rarity of the marbles employed in their conſtruction, as for the elegance of their architecture. Theſe ſtately buildings were moreover enriched with an infinite number of columns, and ſtatues of the moſt precious materials, and executed by the hands of the moſt famous maſters. Luxury, opulence, and effeminacy diſplayed themſelves in every part of Corinth. She was, without contradiction, the richeſt and moſt voluptuous city that could be found in all Greece.

Athens, whoſe maritime force, as we have ſeen in the ſecond part of this work, was not inconſiderable at the time of the Trojan war, does not however deſerve that we ſhould ſtop to ſpeak of it. That city, during all the ſpace we are now conſidering, made no figure either by land or ſea. She had then neither commerce nor marine. Solon, nevertheleſs, had forgot nothing to bring arts and manufactures into honour at Athens. He even made a law, by which a ſon was exempted from the obligation of maintaining his father, if he had taught him no trade [f]. But Attica was too poor in the time of Solon [g], for the utility of his regulations to be quickly perceived. More than an age elapſed before the effect of them became ſenſible. Athens did not grow famous for her commerce and her marine, till after the firſt expedition of the Perſians into Greece. It is at that epocha that we ſee the beginnings of the glory and ſplendor of the Athenians. I can only indicate them: the ages it takes in, exceed the bounds which I have preſcribed myſelf.

[f] Plut. in Solon. p. 90. [g] Id. ibid. p. 91.

With

With regard to the Lacedæmonians, we ought not to place theſe people in the number of thoſe who made themſelves conſiderable by their commerce, and by their naval forces. The ſpirit of the government eſtabliſhed by Lycurgus, was by no means proper to render theſe two objects flouriſhing at Sparta. Commerce was in ſome ſort baniſhed from that capital. Luxury was not only proſcribed, they had even gone ſo far, as to forbid the Spartans the exerciſe of moſt of the mechanical arts [a]. The conſequences of ſuch a policy are eaſily perceived. No body is ignorant that commerce is the ſoul and ſupport of the marine; but there can be no commerce in a ſtate where the arts are not cultivated, and induſtry not excited. The kind of money made uſe of at Sparta, formed of itſelf an invincible obſtacle to commerce. It was of very bad iron, and ſo heavy, that to carry a ſum of ten minæ *, they had need of a cart drawn by two oxen, and of a chamber to lay it up in. That money had no currency amongſt the other people of Greece. They rejected, and even made it a ſubject of raillery [i].

Independent of all theſe conſiderations, many motives prevented Sparta from ever forming a powerful marine. Laconia, although ſurrounded by the ſea on the eaſt, on the ſouth, and on the weſt, was not for that more luckily ſituated. Her coaſts were unſafe, covered with rocks and ſhoals [k]. She had only one port, or rather haven [l], which was neither very large nor very commodious. In fine, we may ſay that Lycurgus had forbid the Lacedæmonians to addict themſelves to the ſea [m]. Let us not then be ſurpriſed that navigation was never held in great honour amongſt this people. It is true, that in ſucceeding times

[a] Xenophon de rep. Laced. p. 397.; Ælian. var. hiſt. l. 6. c. 6.; Plut. in Lycurg. p. 44. 47. 54.; Nicol. Damaſc. in excerpt. Valeſ. p. 522.; Philoſtrat. vita Apollon. l. 4. cap. 32.

* Ten minæ are 709 livres 6 s. 3 den. French money.

[i] Plut. in Lycurg. p. 44. [k] Strabo, l. 8. p. 580.

[l] See Thucyd. l. 1. n. 108. p. 70.

[m] Plut. inſtit. Lac. p. 239.

Sparta,

Sparta, by certain circumſtances, found herſelf obliged to have ſhips; but ſhe was quickly diſguſted with them [a]. Neither was it by their maritime exploits that the Lacedæmonians became illuſtrious.

I might ſpeak of many other nations, as well of European as of Aſiatic Greece, who, towards the ages we are now employed upon, began to turn their views to commerce and navigation. For it is certain, that a great number of cities, of the iſlands and of the continent, then addicted themſelves to maritime traffic. But their hiſtory does not deſerve a particular attention, ſince it furniſhes no details nor circumſtances capable of inſtructing or enlightening us. I ſhall only obſerve, that the Rhodians may be juſtly called the legiſlators of the ſea. They were the firſt who thought of reducing into laws, the uſages of maritime traffic and the police of the ſea. Theſe regulations were found ſo wiſe, that many other nations adopted them, and ordained the naval laws of the Rhodians to be followed for deciding the differences which might ariſe between the ſeafaring men and the traders. We know not in what age theſe laws were formed; only it appears, that they were very ancient [b]. Furthermore, it is to this ſpirit of commerce which poſſeſſed the greateſt part of the inhabitants of Greece, that theſe people were indebted for that degree of power and conſideration which they enjoyed for ſo many ages. A trading nation is, in general, an active and induſtrious nation. Theſe qualities neceſſarily influence the manners, and render the genius fit for great enterpriſes. Were it neceſſary to prove this truth, I ſhould not want inſtances of nations whom commerce has made to flouriſh. I ſhall finiſh by a reflection on

[a] Plut. inſtit. Lac. p. 239.

[b] Cicero pro lege Manil. n. 18. t. 5. p. 19., Strabo, l. 14. p. 964.

We find at the end of the ſecond volume of a work intitled *Jus Græco-Romanum*, printed at Francfort in 1596, ſome laws wrote in Greek, and intitled, *Naval laws of the Rhodians*. Many authors believe, that, in effect, theſe laws are the ancient text of thoſe which were made by the Rhodians. But no opinion can be more groundleſs, as it would be eaſy for me to demonſtrate, were not that diſcuſſion entirely foreign to our ſubject.

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the manner in which, at different times, the Greeks regarded commerce.

Heſiod and Plutarch have obſerved, that, in the ages I am now ſpeaking of, commerce was held in great honour amongſt the Greeks. No labour, ſay theſe authors, was accounted ſhameful; no art, no trade placed any difference amongſt men[p]. This maxim ſo reaſonable, and ſo uſeful to ſuch a nation as the Greeks, was nevertheleſs altered. We ſee by the works of Xenophon, of Plato, of Ariſtotle, and many other writers of merit, that, in their age, all profeſſions which tended to gain money were regarded as unworthy of a free man[q]. Ariſtotle maintains, that, in a well-ordered ſtate, they will never give the right of citizens to artiſans[r]. Plato will have a citizen puniſhed who ſhould enter into commerce[s]. In fine, we ſee theſe two philoſophers, whoſe ſentiments on the principles and maxims of government are otherwiſe ſo oppoſite, agree in preſcribing, that the lands ſhould be cultivated only by ſlaves[t]. It is very ſurpriſing, that with ſuch principles, which all the Greeks appear to have imbibed, they ſhould ever have been ſo intelligent in commerce, and ſo powerful at ſea, as they are known to have been for ſome ages.

[p] Heſiod. op. et dies. v. 311; Plut. in Solon. p. 79. D.
[q] Xenoph. œcon. p. 482.; Plato de rep. l. 2. de leg. l. 8. p. 907.; Ariſt. de rep. l. 7. c. 9. l. 8. c. 2. l. 3. c. 4.
[r] De rep. l. 3. c. 5. p. 344. A. [s] De leg. l. 2. p. 799.
[t] Plato de leg. l. 7. p. 891.; Ariſt. de rep. l. 7. c. 10. p. 437. D.

BOOK V.

Of the Art Military.

MIlitary expeditions were but too frequent in the ages we are now conſidering, and there were then but too many of thoſe princes born for the plague of humankind, thoſe ſcourges of the earth whom they have honoured with the name of conquerors. I ſhall not enter into a detail of their exploits. We ought leſs to regard the hiſtory of their conqueſts than that of the art-military, which ſhould be our principal object. I ſhall compriſe under one and the ſame article the Babylonians, the Aſſyrians, the Medes, Syrians, and Egyptians, in regard to the few details which their hiſtory furniſhes in theſe ages relating to the art-military. On the contrary, I ſhall treat ſeparately of that which concerns the European nations, that is to ſay, the Greeks, becauſe of the abundance of facts.

We ſhall ſee by the facts which I am going to relate, that, in the ages which make the object of this laſt part of our work, they made war much in the ſame manner as they had always done before. The people had as yet but a very confined knowledge of the military art. As to the cruelty and barbarity with which I have ſo juſtly reproached the firſt ages, thoſe I am now ſpeaking of, ſhew us no difference in that reſpect: we ſee no change advantageous to humanity. The law of nations was then as little known, and as often violated, as it could have been in the firſt ages.

CHAP. I.

Of the Aſſyrians, Babylonians, Medes, Syrians, Egyptians, &c.

IN the preceding books I have ſhown how little the art of making war was underſtood in ancient times. In effect,

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we ought to put a great difference between giving battle and directing the operations of a campaign. The gaining a battle formerly depended only on the number of troops, and on their courage; ſkill and capacity had very little ſhare in it. But theſe two qualities are abſolutely neceſſary in forming the plan of a campaign. In this article particularly conſiſts the art of making war. Theſe principles being eſtabliſhed, it is eaſy to ſhew, that the military art had as yet made but little progreſs in the ages I am now ſpeaking of.

In effect, what idea can we form of the manner in which princes then made war, when we ſee, that, for the moſt part, they took the field without preparation, without having any formed plan, or any fixed and deliberate projects? In theſe times of ignorance and barbariſm, humour or chance commonly determined a conqueror to fall upon one country rather than on another. The ſcripture furniſhes an example of that ſort in the perſon of Nebuchadnezzar. This monarch, ſays Ezekiel, ſtopped in a place where two roads met. There he wanted to learn by divination, on which ſide he ſhould turn his arms. The lot having fallen on Jeruſalem, he marched againſt that city [a]. This paſſage, which is not the only one I could cite, is ſufficient to prove the manner that princes undertook and prepared themſelves for a war.

The uncertainty which prevailed in the conduct of theſe monarchs, appears to me ſo much the more ſurpriſing, as they drew along with them innumerable forces. It was certainly neceſſary to think of ſubſiſtence for ſo many thouſands; and how was it poſſible to provide it when they took the field without firſt determining where ſhould be the ſeat of war? Add to this, that there was a numerous cavalry, beſides an aſtoniſhing multitude of chariots, in the armies of the princes I have been ſpeaking of.

I ſhould aſk alſo, how they contrived to make ſuch armies perform their evolutions in a day of action? We do not

[a] C. 21. v. 21. & 22.

find, that, in the ages we are now conſidering, they were divided into different bodies. It even appears, that this method was unknown to the Aſiatics till the reign of Cyaxares. Herodotus affirms, that this prince was the firſt who ſeparated the pikes, the horſe, and the archers from each other. For before that time, ſays this great hiſtorian, all theſe different bodies marched confuſedly and pell-mell in the armies [b]. Cyaxares reigned about 630 years before J. C. Military diſcipline was therefore known and introduced into the armies of the Aſiatics only ſince that epocha *.

As to what concerns the attack and defence of places, that part of the military art was not then abſolutely unknown in Aſia. Many ſieges are mentioned in ſcripture. Thoſe of Samaria, of Tyre, and of Jeruſalem, furniſh ſome lights on the means which the Aſiatics made uſe of to ſucceed in this ſort of operations. We ſee, that their ordinary manner of attacking a place conſiſted in ſurrounding it with trenches and walls, ſo cloſely that none of the inhabitants could go out [c]. After that, they brought up the battering-rams [d] to beat down the gates or the walls. When the breach was judged conſiderable enough, they attempted the aſſault. To favour and facilitate that manœuvre, they raiſed terraſſes [e] which they lined with archers, or ſlingers, who drove the beſieged from the breach. They alſo employed the ſap [f] to throw down the walls of the place. Such was the manner of taking places beſieged in the ages I am now ſpeaking of, and ſuch it had almoſt always been before.

[b] L. 1. n. 103.

* In this general propoſition we muſt except the Hebrews. In the time of Moſes, they were divided into tribes, which formed each a ſeparate troop with its particular ſtandard. Accordingly we ſee, that the army of David was divided into bodies conſiſting of one hundred men, and of one thouſand men. It was alſo formed in three principal diviſions, each commanded by a general officer, having under him tribunes and centurions. 2 Sam. c. 18. v. 1. 2. & 4.

[c] Id. c. 20. v. 15.; 2 Kings, c. 24. v. 10.

[d] Ezekiel, c. 4. v. 2. c. 21. v. 22. c. 26. v. 9.

[e] Id. c. 4. v. 2. c. 21. v. 22, c. 26. v. 8. [f] 2 Sam. c. 20. v. 15.

As

As to the defence of these same places, it consisted in the strength and thickness of the walls, in the breadth of the ditch that surrounded them, in the height of the towers, and in the various machines which were employed in darting of long arrows, and hurling huge masses of stone [g]. These means were then sufficient to enable a place to hold out a long time. The siege of Tyre by Nebuchadnezzar lasted thirteen years [h], and that of Azoth by Psammetichus twenty-nine [i]. These facts have nothing in them absolutely incredible, if we reflect, that the situation of a place aided by some works formerly rendered it impregnable. Besides, we ought to look upon the sieges of Tyre and Azoth only as mere blockades. That was the only method they could employ to conquer such cities as these. They were to be reduced by famine, and it was not easy to do so. In effect, we have already seen in the preceding books, that most of the great cities had formerly a certain space of land for tillage inclosed within their walls [k].

Furthermore, although there were then places fortified, and capable of holding out a long time, it is certain they must have been few in number, or if there were many in a state, it is certain, that they did not know how to make the proper use of them. In effect, the greatest advantage that can be drawn from fortified places, is to stop the progress of a victorious enemy. Nevertheless, in the ages I am now speaking of, one single battle always decided the fate of a kingdom. We see no army recover itself or rally after a first defeat. All the wars were then, as formerly, decided in a single campaign. The gain of a battle infallibly drew on the conquest of a whole kingdom.

In general, the people of Asia do not appear to have carried very far the knowledge of the art military. We do not see, that they knew how to take advantage of posts; to seize opportunely a favourable position; to draw the war in-

[g] 2 Chron. c. 26. v. 9. 15.
[h] Jos. antiq. l. 10. c. 11. sub. fin. adverf. Appion. l. 1. c. 7.
[i] Herod. l. 2. n. 157. [k] Supra, b. 2. c. 1. p. 55.

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to a country naturally defenſible; to make uſe of defiles, either to ſurpriſe or haraſs an enemy in his march, or for ſecurity againſt his attacks; to lay artful ambuſcades; to prolong a campaign with addreſs; to avoid coming to a deciſive action with an enemy ſuperior in force; to reduce him at length to conſume himſelf through ſcarcity of proviſions and forage. Neither do we ſee, that theſe people were either very ſkilful or very attentive to take advantage of the diſpoſition of the ground, to chuſe places where they might ſupport their right or left by rivers, moraſſes, or heights, to prevent their being ſurrounded. They were equally ignorant of the art of engaging a large army with one leſs numerous [l]. No mention is made of theſe reſources in the wars of the Aſiatics. It appears, that marches, counter-marches, and, in fine, many other military manœuvres were always unknown amongſt them.

I ſhall ſay only a word of the ordinary conſequences of victory amongſt the people of Aſia. I have ſaid enough in the firſt and ſecond parts of this work, of the exceſſes which the conquerors were originally accuſtomed to. It was ſtill the ſame thing in the ages we are now going through. Their hiſtory in that reſpect is one continued ſcene of the moſt horrible barbarities; and all I have ſaid of the firſt ages agrees but too well with thoſe we are now employed upon. I need not therefore, I think, take the trouble of retouching that frightful picture. I ſhall remark one cuſtom, of which we meet many examples in ſcripture; a cuſtom as barbarous, and as contrary to the laws of nations, as the cruelties with which the firſt conquerors always ſullied their victories. We ſee the kings of Aſſyria and of Chaldea, not content with having carried deſolation and havock into the countries they had ſubjected, carry away all the inhabitants whom the ſword had ſpared, and tranſport them into far diſtant countries [m]. Theſe conquerors, if we may ſay ſo, regarded men as productions of the earth, which they might indifferently tranſplant from one climate to another.

l Rollin, hiſt. anc. t. 2. p. 419.

m 2 Kings, c. 17. v. 6. c. 24. v. 16. c. 25. v. 11.

I

I ſhall alſo make another reflection upon this ſubject. After the facts which my readers have ſeen, we ſhould be led to believe that the earth muſt formerly have been much leſs peopled than it is at preſent. In ancient times the people were almoſt continually in arms. Perpetual wars, ravages, carnage, and the total deſtruction of cities, were the ordinary conſequences of victory. We have ſeen proofs of it in the fate which befel Nineveh [n], Samaria [o], Tyre [p], and Jeruſalem [q], without ſpeaking of many other examples which I might cite. A country conquered then, was infallibly a country ruined and deſtroyed. Even a conſiderable time muſt have paſſed before it could recover; ſince the conqueror, as I have juſt ſaid, carried into captivity, all that might have eſcaped the fury of the ſoldier; and how many families muſt there not have periſhed in theſe forced and cruel tranſmigrations? The manner in which they then made war, could not therefore fail to ſweep from the earth the greateſt part of its inhabitants. Aſia in particular, the perpetual theatre of horrors and devaſtations, ſhould very ſoon have found herſelf abſolutely deſert and uninhabited. Nevertheleſs, the facts related by ancient hiſtorians atteſt, that this part of the world was infinitely populous, even a few ages after thoſe we are now going through. It is, I own, a problem which I cannot eaſily ſolve.

CHAP. II.

Of the Greeks.

IN the examination we are going to make of the ſtate of the art military amongſt the Greeks, in the ages

[n] Tobit, c. 14. v. 14. edit. of the Septuagint; Nahum, c. 2. v. 8. 10. 13. c. 3. v. 7. Sophon. c. 2. v. 13. 15.; Ezekiel c. 31. v. 3. &c.; Herod. l. 1. n. 106.; Diod. l. 2. p. 142.; Strabo, l. 16. p. 1071.; Alex. polyhiſt. apud Syncell. p. 210.

[o] 2 Kings c. 17. v. 6. Hoſea, c. 14. v. 1.; Micah, c. 1. v. 6.

[p] See ſupra, b. 4. c. 2. p. 152. [q] 2 Kings c. 25. v. 9. &c.

now

now in queſtion, I ſhall enter into no detail of the wars they might have had amongſt themſelves. That object is not worth the while. The hiſtory of military events which then happened in Greece, is neither very inſtructive nor very intereſting. I ſhall therefore content myſelf with ſpeaking, firſt of the cuſtoms which were common in general to all the Greek nation, and then of the practices which may be affirmed to have been peculiar to the Spartans and to the Athenians. Theſe two were without contradiction the firſt, and even the only people, who, in the ages we are now employed on, had made ſome progreſs in the military art. I need no other proofs of it than the ſuperiority which Sparta and Athens ſo long enjoyed over all the other cities of Greece. I do not, moreover, pretend to enter into any great details upon all the objects I have indicated. As to the Athenians and Spartans in particular, I do not think there is occaſion to dwell long upon their diſcipline and military cuſtoms, theſe objects being the beſt known and the moſt familiar.

ARTICLE I.

Of the military practices common to all the people of Greece.

WHen I ſpoke of the military diſcipline of the Greeks at the time of the Trojan war, I ſaid, that we did not ſee very clearly in what manner they then levied troops. We can ſpeak more affirmatively upon this ſubject in the ages we are now going through. We know, that at Lacedæmon, for example, all the citizens were obliged to bear arms from the age of thirty years to that of ſixty[1]. It was the ſame thing at Athens. All the young Athenians cauſed themſelves to be inrolled in a public regiſter at the age of 18 years, and engaged themſelves, by a ſolemn

[1] Potter archeolog. l. 3. c. 2.

oath,

oath, to ſerve the republic. That act obliged them to march on all occaſions that preſented till the age of ſixty years [r]. We may conjecture that this uſage had equally place in all the other ſtates of Greece, who, in all probability, obſerved in that reſpect the ſame diſcipline as Sparta and Athens. Let us alſo obſerve, that amongſt all theſe people deſerters were puniſhed with death [s], and thoſe branded with infamy, who in battle had abandoned their buckler [u].

In the earlieſt times of Greece, the ſoldiers made war at their own expenſe [x], and we ought not to wonder at it. Wars of ambition were as yet unknown. They took arms only to defend themſelves when attacked, and in hopes of plunder. All wars therefore were then either uſeful or neceſſary, and every individual perſonally intereſted. Armies, beſides, went but a very little diſtance from the diſtrict where the troops which compoſed them had been raiſed; and they did not fail to return to it at the end of the campaign. The ſoldier therefore could eaſily provide for his ſubſiſtence. The war of Troy excepted, many ages paſſed before the Greeks thought of carrying their arms out of their own country, and till that time their troops were in uſe to demand pay; for, even in the expedition againſt Troy, the bait of a rich booty made an ample recompenſe.

The ambition of the Greeks having increaſed with their power, they wanted at length to take part in the events of other countries. Different circumſtances engaged them in proceſs of time often to tranſport their troops out of their own territories. Then the ſtate was obliged to furniſh particular ſupplies for the ſubſiſtence of the armies which they ſent into diſtant countries. Although hiſtory does not expreſsly ſay, that Sparta gave pay to thoſe of her inhabitants whom ſhe ſent into Aſia, yet it may be conjectured

[r] Potter archeolog. l. 3. c. 2. [s] Lucian. in navig. n. 33. t. 3. p. 270.
[u] See Plut. in Pelop. p. 278. B.; S. Empiric. Pyrrhon. Hypot. l. 3. c. 24. p. 181.
[x] See part 2. b. 5. chap 3.

that the public treaſure contributed to their maintenance. It is ſaid, that Lyſander cauſed to be augmented the pay of the Lacedæmonians who ſerved in the galleys, which that general conducted to the younger Cyrus[y]. This fact authoriſes us to think, that the troops of Sparta were then in the uſe of receiving pay.

Till the time of Pericles, the ſoldiers at Athens had ſerved the republic gratuitouſly; but under his government, the war being carried on at a diſtance, in the Cherſoneſus, in Thrace, in the iſlands, in Ionia, &c. for many months together, the republic was obliged to provide ſubſiſtence for citizens ſo long abſent from their country, and, of conſequence, unable to procure the means of life. For the inhabitants of Attica were for the moſt part artiſans, and ſubſiſted only by their labour and their induſtry. The pay which the republic gave her troops was ſtated at two oboli a-day to a foot-ſoldier, and one drachma to a trooper[z]. It is thus that ambition, in proceſs of time, conſtrained the Greeks to keep ſoldiers in pay which they had not originally done. The facts we have juſt ſeen, are, it is true, poſterior to the ages which cloſe this third and laſt part of our work. I have notwithſtanding thought this digreſſion neceſſary to give a complete idea of the military diſcipline of the Greeks. I return to the epocha which ought at preſent to occupy us.

I have ſaid in the preceding volume, that, according to all appearance, the Greeks, in the heroic times, were not very expert in the art of handling their arms[a]. I ſhall add, that it muſt have been ſtill the ſame in the ages we are now going through. We know, in effect, that there never were any fencing-maſters amongſt the Lacedæmonians[b]; and as for the Athenians, they only introduced that profeſſion in the eighth year of the Peloponneſian war[c]. Would not this fact lead us to think that the Greeks were

[y] Plut. in Lyſand. p. 435. B.
[z] Potter archæol. l. 3. c. 2. p. 432.
[a] See part 2. book 5. c. 3. [b] Plato in Laches, p. 482. 483.
[c] Ibid. See the notes of M. Dacier upon this dialogue, p. 338.

not

not in uſe to exerciſe their troops in arms; and that, in this reſpect, there was neither rule nor diſcipline amongſt theſe people, every one being permitted to follow his own ideas and particular views?

As to marches, incampments, evolutions, and other military operations, it is not poſſible to ſpeak of them. We have nothing that can indicate whether the Greeks, in the times I ſpeak of, had any fixed principles, any conſtant and uniform maxims upon theſe articles. I ſhould think in general, that theſe people had not as yet made any great progreſs in tactics. That ſcience began very late to receive clearneſs and form.

I have proved elſewhere, that, at the time of the Trojan war, there was no cavalry, properly ſo called, in the Grecian armies [d]. The ages here in queſtion offer a remarkable difference in this reſpect. In them we ſee the Greeks make uſe of cavalry, and have bodies of them in their armies. It might perhaps be intereſting to fix the epocha of this change, and make known the authors of it; but it is not poſſible, on this article, to gratify the curioſity of the reader. We are abſolutely ignorant by whom and at what time cavalry was introduced into Greece. All we can ſay of it is, that the firſt war of Meſſene, whoſe epocha falls about the year 743 before J. C. is the firſt occaſion where hiſtory makes mention of cavalry in the Grecian armies [e]. There were of them in the army of the Meſſenians, and in that of the Lacedæmonians. Apparently this eſtabliſhment muſt have been pretty recent; for, beſides that this cavalry was few in number, it was otherwiſe ſo bad as to be ſcarce of any uſe. Pauſanias remarks on this ſubject, that the inhabitants of Peloponneſus knew not as yet the art of well-managing a horſe [f]. We may therefore ſuppoſe, without giving too much to conjecture, that the introduction of cavalry into the Grecian armies did not greatly precede the firſt war of Meſſene.

[d] See part 2, book 5. c. 3.
[e] See Acad. des inſcript. t. 7. m. p. 328. 327.
[f] L. 4. c. 8. p. 300.

The Greeks, moreover, had always very few cavalry. Not that theſe people did not make great account of them. We ſee, on the contrary, that they valued them highly; but the ſoil of Greece, generally ſpeaking dry and barren, was never favourable for horſes. The ſoil of Theſſaly alone was fit for breeding and keeping horſes; they degenerated every where elſe [g]. It is not poſſible to doubt of this, when we ſee that at the battle of Marathon, and at that of Platea, the Greeks had no cavalry, becauſe Theſſaly was then in the power of the Perſians [h]. The Grecian army was, notwithſtanding, one hundred and ten thouſand ſtrong at the battle of Platea. The maintenance of a body of Theſſalian cavalry was beſides ſo expenſive, that the greater part of the Grecian cities were not in a condition to ſupport it. Accordingly whoever anciently could maintain horſes, was held amongſt the Greeks in the higheſt conſideration [i].

Let us remark, while we are on the ſubject of cavalry, that no nation of antiquity knew the uſe of either ſaddles or ſtirrups. No mention is made of them in ancient writers. Education, exerciſe, and uſe had taught the horſemen of thoſe times to do without thoſe helps. They knew how to ſpring lightly on horſeback, and keep their ſeat without the help of either ſaddle or ſtirrups. Thoſe who through age or weakneſs had not the ſame agility, took the aſſiſtance of another; or elſe they took the advantage of a great ſtone, or ſome other elevation, to mount on horſeback [k]. Theſe cuſtoms do little honour to the genius and ſagacity of the ancients. We cannot ſee without aſtoniſhment, how little induſtrious they were to procure themſelves certain conveniencies which we can hardly comprehend it poſſible ever to have done without. Let us now ſay a little of the attack and defence of places amongſt the Greeks.

[g] See Acad. des inſcript. t. 7. m. p. 330.
[h] Herod. l. 6. n. 112. l. 9. n. 128.
[i] Ariſt. de rep. l. 4. cap. 3. t. 2. p. 365. B.
[k] See Potter archeolog. l. 3. cap. 2. p. 435.

This

This part of the military ſcience was ſtill little known in Greece in the ages which employ us at preſent. In the war which the Lacedæmonians declared againſt the Meſſenians, we ſee the city of Ithome ſuſtain a ſiege of 19 years, leſs by the ſtrength of its fortifications than through the ignorance of the beſiegers. The defence of that place conſiſted ſolely in its poſition. It is ſeated upon a mountain of conſiderable height and ſufficiently ſteep [l], to render the approaches to it very difficult to people of ſo little experience in the art of beſieging towns as the Greeks of thoſe times. It is thus that many places were able, even before they had invented any kind of fortifications, to ſuſtain very long ſieges. Ariſtotle tells us alſo, that the ancient cities of Greece were built in ſuch a manner, that although they were not ſurrounded by walls, they were nevertheleſs able to defend themſelves by the peculiarity of their conſtruction. All the ſtreets were ſo narrow and ſo full of windings, that they could, with a ſmall force, eaſily ſtop an enemy at every ſtep, and cruſh him from the tops of the houſes [m]. Neither is Ariſtotle the only writer of antiquity who has ſpoke of this fact [n]. We even find examples of it amongſt other nations beſides the Greeks [o].

I do not at preſent ſee any other objects to indicate, on the ſtate of the art-military in Greece. I ſhall only remark one practice which we cannot enough commend. It was the cuſtom, after a battle, to aſſemble the army, to adjudge openly, and in preſence of all the troops, the prize of valour to him who ſhould be thought to have deſerved it [p]. It were ſuperfluous to take up time with ſhewing the effect which ſuch a cuſtom muſt have had amongſt a people ſo greedy of glory and diſtinction as were the ancient Greeks.

We have ſeen elſewhere what were the laws of war a-

[l] Pauſ. l. 4. c. 9.; Strabo, l. 8. p. 556

[m] De rep. l. 7. c. 11. [n] See Diod. l. 4. p. 321.

[o] See le Rec. des voyages de la compagnie des Indes Hollandoiſe, t. 4. p. 53. & 54.

[p] See Herod l. 8. n. 123; Diod. fragm. t. 2. p. 637. n. 10.

mongſt

mongſt thoſe people in the heroic times [q]. They were not leſs barbarous in the ages that now employ us. The inhabitants of a taken city were immediately reduced to ſlavery, and the place entirely deſtroyed. I think that this ſpirit of cruelty may be attributed to the political conſtitution of Greece, where the republican government ruled, and was preferred to all others. In effect, it appears to me, by hiſtorical proofs, that, generally ſpeaking, the conſequences of a victory were always more cruel in republics than in monarchical ſtates. It is even eaſy to explain the reaſon of it. Wars undertaken by monarchs are uſually regarded as perſonal, of ſovereign againſt ſovereign. The ſubjects are ſcarce ever actuated by motives of private vengeance. Thence comes in part, that humanity which takes place after victory, and the good treatment which priſoners now meet with amongſt moſt of the European nations. It muſt be otherwiſe in republics. Guided by other principles and other intereſts than monarchical ſtates, the wars they undertake are almoſt always national. Every member of the ſtate takes a lively and perſonal concern in it, and in battle is neceſſarily ſtimulated by particular animoſity. Hence their victories muſt be attended with exceſſes unknown in the wars of monarchs; and this we ſee to have happened in all thoſe of the Greeks. Theſe people, in the times I am now ſpeaking of, were divided into an infinity of little republics; all the members of which had a jealous and perſonal hatred, from which they reciprocally ſought to ruin and deſtroy each other

After this general view of the ſtate of the art-military amongſt the Greeks in the ages which now employ us, we muſt ſay a word or two upon the diſcipline peculiar to the Lacedæmonians and to the Athenians. Antiquity gives to Lycurgus the honour of all the regulations relating to war amongſt the Lacedæmonians. We are therefore enabled to judge of the ſkill of theſe people in the art-military. It is not altogether the ſame with the Athenians.

[q] See part 2. book 3. c. 3.

Their

Their progreſs in this reſpect was much ſlower. They began to form themſelves to the ſcience of war, but a ſhort time before the irruption of the Perſians into Greece. Nevertheleſs, that I might leave nothing to deſire upon this article, I have thought proper to anticipate the times a little, and give an idea of the diſcipline and military capacity of the Athenians.

ARTICLE II.

Of the military diſcipline of the Lacedæmonians.

WE ought to regard the Lacedæmonians as having been, of all the people of Greece, thoſe who poſſeſſed the military ſcience in the moſt eminent degree. All the laws of Sparta, and all the eſtabliſhments of Lycurgus, tended to make as many ſoldiers as they reckoned citizens in the republic. War was in ſome ſort the only object regarded at Sparta in the education of their youth [r]. After this reflection, we are not to wonder that the Lacedæmonians were unrivalled in Greece, for experience, capacity, and exactneſs of military diſcipline. To theſe qualities they owed their ſucceſs and their ſuperiority.

Amongſt the Spartans, as amongſt the other people of Greece, the principal ſtrength of the armies conſiſted in infantry. It was divided, let the term be allowed me, into a certain number of regiments, compoſed each of four battalions. The battalion conſiſted of 128 men, and was divided into four companies of 32 men each [s]. All theſe bodies were commanded by officers of ſubordinate ranks and employments [t]. One of the two kings of Sparta was always placed at the head of the armies [u].

The arms of the Lacedæmonians conſiſted in great buck-

[r] See Plut. in Lycurg. [s] Thucyd. l. 5. n. 68.
[t] Id. l. 5. n. 66.; Xenoph. de republ. Laced. p. 399.
[u] Herod. l. 5. n. 75.; Thucyd. l. 5. n. 66.; Xenoph. de republ. Laced. p. 401. & 402.

lers,

lers, lances, half-pikes, and very ſhort ſwords [x]. They had alſo, if we may call it ſo, a ſort of uniform for the Lacedæmonian troops. All the authors of antiquity agree that they were conſtantly clothed in red. The choice of that colour was founded upon two motives. They intended both that the ſoldiers might the leſs perceive the loſs of blood, and to hide from the enemy the knowledge of the wounds they had made [y].

Flutes were the military inſtruments of the Lacedæmonians. They went always to battle to the ſound of that inſtrument, in order, ſays Thucydides, that marching at an equal pace, and as it were in cadence, they might be the leſs expoſed to break their ranks. This was the principal object of the military diſcipline of theſe people [z]. All their principles, all their tactic rules, and all their military precepts, tended to prevent the troops from ever being broken or diſperſed. They had provided for and obviated every event which might expoſe them to this danger. In this view the Lacedæmonians were forbid to ſtrip the dead in battle [a]. The ſame may be ſaid of their maxim of never purſuing too ardently a flying enemy. The Lacedæmonians were very ſenſible of the hazards they might incur on ſuch an occaſion. They wiſely preferred moderation and caution to the advantage of killing ſome men the more [b]. It even often happened, that their enemies having learned, that all who reſiſted were put to the ſword, and that the runaways only were pardoned, preferred flight to reſiſtance [c].

We ought alſo to beſtow great praiſes on the maxim which Lycurgus had endeavoured to inculcate with his

[x] Plut. in Lycurg. p. 51. F.

[y] Xenoph. de rep. Laced. p. 399.; Plut. inſtit. Lac. p. 238. F.; Ælian. var. hiſt. l. 6. c. 6.; Val. Max. l. 2. c. 6.; Suidas, t. 3. p. 639.

[z] L. 5. n. 70.; Plut. in Lycurg. p. 53. E.; Pauſ. l. 3. c. 17. p. 251. l. 4. c. 8. p. 302.; Lucian. de ſaltat. n. 10.

[a] Ælian. var. hiſt. l. 6. c. 6.; Plut. t. 2. p. 228. F.

[b] Pauſ. l. 4. c. 8. p. 300.; Plut. in Lycurg. p. 54. A.

[c] Plut. ibid.

people.

people. He forbade them to make war too often with the ſame enemies, for fear of inſtructing them, by laying them under the frequent neceſſity of defending themſelves [d]. Theſe facts are, I think, ſufficient to prove how greatly the Lacedæmonians had ſtudied the military art, and the progreſs they had made in it.

It muſt appear very aſtoniſhing, that a people, whoſe greatneſs of ſoul, and whoſe prudence we cannot too much commend, ſhould have been ſo ſubject to ſuperſtition as were the Lacedæmonians. They were ſwayed by this weakneſs to ſuch a degree, as to make them riſk the ſafety of their country. Hiſtory has preſerved us one very memorable example. From motives unknown to us at this day, the Lacedæmonians durſt not take the field before the day of the full moon. At the time that the Perſians, with an army of 300,000 men, were on the point of invading Greece, the Athenians, whom the ſtorm firſt threatened, diſpatched meſſengers in great haſte to Sparta, demanding ſuccours. The anſwer they got in ſo critical a conjuncture was, that the Lacedæmonians could not march for ſome time, becauſe their religion did not allow them to take the field before the full moon [e].

The Lacedæmonians are liable to a reproach ſtill more ſhameful, and more eſſential. They were no way ſcrupulous on the article of probity. All means by which they might triumph, appeared to them good and lawful. Perfidy and breach of faith coſt them nothing [f]. They are alſo accuſed of being the firſt of all known nations, who attempted to corrupt with money the fidelity of the enemies generals, and rendering, ſo to ſpeak, their victories venal [g]. In this reſpect, the Lacedæmonians followed their prevailing taſte. Theſe people, in general, made great account of cunning and of fraud. We know, that theft was not only tolerated, but even in ſome ſort authoriſed,

[d] Plut. in. Lycurg. p. 47. D. Apophthegm. p. 189. F. See what the Czar Peter I. ſaid on the war waged on him by Charles XII. Hiſt. de Charles XII. par Voltaire, l. 1. *ſub. fin.*

[e] Herod. l. 6. n. 106.; Strabo, l. 9. p. 611.; Pauſ. l. 1. c. 28. l. 3. c. 5.

[f] See Herod. l. 6. n. 79. [g] Pauſan. l. 4. c. 17. p. 321.

by the laws of Sparta [h]. This principle had influence even in the affairs of the ſtate. When the Lacedæmonians owed a victory to the ſubtilty and addreſs of their generals, they ſacrificed an ox; but when they thought it due only to their courage and the force of their arms, they contented themſelves with ſacrificing a cock [i]. The intention of the Lacedæmonians in this practice, which appears ridiculous, was to accuſtom their generals to employ cunning more willingly than open force [k].

To this ſuccinct account I have thought proper to confine what I had to ſay of the military diſcipline of the Spartans. Thoſe who ſhall deſire to know more of the marches, evolutions, military ranks, and order of incampment of theſe people, may conſult the treatiſe of Xenophon, intitled, *Of the republic of the Lacedæmonians.*

ARTICLE III.

Of the military diſcipline of the Athenians.

I Have already ſhown the reaſons that do not permit us to enter into any great details upon the military diſcipline of the Athenians. It muſt be granted, beſides, that we have but few lights upon this object now remaining, either, that time has robbed us of thoſe of the ancient authors who might have inſtructed us in it, or, which appears to me moſt probable, that there was nothing in this reſpect which deſerved to be particularly tranſmitted to poſterity. The Athenians, in effect, did not yield to the Lacedæmonians in bravery; but I think they were inferior to them for ſkill and capacity, and in general for all the operations of war. The manner in which the armies of the Athenians were commanded, cannot, for example, give us a great opinion of the abilities of this people in the art-military.

The Athenians placed at the head of their troops ten chiefs equal in authority [l], becauſe that Athens being

[h] See Plut. in Lycurg. p. 50. et Inſtitut. Laced. p. 237.
[i] Plut. inſtit. Laced. p. 238. F. [k] Id. ibid.
[l] Herod. l. 6. n. 103.; Corn. Nepos in Miltiad. n. 4.; Plut. apophthegm. p. 177. C.; in Cimone, p. 483. E.

compoſed

compoſed of ten tribes, each of them would furniſh its own. Theſe ten chiefs took their turns in the command; that is to ſay, they commanded alernately, each for one day [m]. Their authority being equal, it might happen, as the event ſhewed more than once, that, in their deliberations, five ſhould be of one opinion, and five of another [n]. To remedy the inconveniencies which this diviſion of opinions could not have failed to occaſion, they joined to the ten generals an officer known in antiquity by the name of *Polemarch*. This officer had a vote in the council of war, and ſo could turn the ſcale [o].

It was the people who choſe the ten generals charged with the command of the troops of the republic. They were uſually in place only for one year, and were almoſt always changed at every campaign. I think it were ſuperfluous to inſiſt upon the inconveniencies and defects of ſuch a diſcipline. I ſhall content myſelf with relating a bon mot of Philip King of Macedon, the father of Alexander. I admire, ſaid this prince, the happineſs of the Athenians. In the whole courſe of my life, I have been able to find but one general (*Parmenio*); but the Athenians never fail to find, to their hand, ten every year [p].

It ſuffices to know the character of the people of Athens, to be able to perceive the motives of a conduct ſo whimſical and ſo ſingular. It was the fear of tyranny which moſt certainly had put the Athenians upon contriving that multiplicity, and this continual change of generals. Never people, in effect, were more paſſionately fond of liberty, or took more jealouſy and umbrage at their chiefs than that of Athens. All their politics tended to diminiſh the authority which they were obliged to truſt them with. They ſought therefore to ſhorten the duration of it, and to cauſe the command to paſs inceſſantly into different hands, in the view of preventing and hindering the enterpriſes which their generals might be tempted to

[m] Herod. l. 6. n. 110.; Plut. in Ariſtid. p. 321.
[n] Herod. l. 6. n. 109. [o] Ibid. n. 110.
[p] Plut. apophthegm. p. 177. C.

form againſt their liberty, and againſt their independence q.

As to the reſt, when I advanced that the Athenians were very inferior to the Lacedæmonians in experience and military capacity, I did pretend to rob the firſt of the glory which they ſo juſtly acquired by many well-conducted expeditions. I only meant to ſay, that in general the Athenians appear to have wanted that firmneſs and that conſiſtency of conduct, which alone can inſure the ſucceſs of enterpriſes. Inconſtancy, impatience, and precipitation governed but too often the ſteps of the Athenians. It is to theſe defects, inſeparable from the conſtitution of their government, rather than to any real incapacity, that I think we ought to attribute the misfortunes which overwhelmed them about the end of the Peloponneſian war. By her want of conduct, her preſumption, and her temerity, Athens loſt even the advantages which ſhe had in ſea-affairs over the Lacedæmonians and the other people of Greece. I can dwell no longer upon an article ſo intereſting. The events which occaſioned the total fall and entire humiliation of the Athenians, happened in ages which do not enter into the plan I have propoſed *.

I have already had occaſion to ſay, that humanity conſtituted the ground of the general character of the Athenians r. We find a ſtriking proof of this in a law which does too much honour to this people to paſs over it in ſilence. That law ordained, that thoſe who had been maimed in the wars, ſhould be maintained at the expenſe of the ſtate. The ſame favour was granted to the fathers and mothers, as well as to the children of thoſe who, having died in battle, had

q See ſupra book 1. c. 5. p. 30.

* It is for this reaſon alſo that I could not poſſibly ſpeak of the naval forces of the Athenians. I ſaid in the article of navigation, in laying open the ſtate of the marine among the Greeks, in the ages we are now employed upon, that Athens had then neither a mercantile nor a military marine. In effect, the Athenians did not turn their attention to the ſea, till the invaſion of Greece by Xerxes, and that event is poſterior to the ages which cloſe this third and laſt part of our work.

r Supra, book 1. c. 5. art. 1. p. 38.

left

leſt a family poor and unable to ſubſiſt [t]. We may ſay of ſuch an eſtabliſhment, that it ſhewed equally the humanity and wiſdom of the legiſlator who propoſed it, and the generoſity of the people who adopted it. Antiquity gives the honour of it to Piſiſtratus [u], who ſeized the government of Athens about the year 550 before J. C.

I do not think it neceſſary to dwell any longer upon the military diſcipline of the Athenians. To ſpeak of it properly, I ſhould be obliged, as I have already ſaid, to come down to ages which would exceed the bounds I have preſcribed myſelf. In effect, it was only a little time before the age of Pericles and Alcibiades, that tactics began to take a certain and regulated form amongſt the Athenians. It was alſo nearly about the ſame time that this people made many advantageous changes in their armour [w], and that they became acquainted with the art of beſieging and defending places. Till this time, I do not ſee, that, the Spartans excepted, the Greeks had any fixed principles, or very conſtant and poſitive rules upon all theſe objects. I think therefore, that, for the ages I have had occaſion to ſpeak of in this work, we muſt content ourſelves with general views and ideas, and rather inquire into the ſpirit which animated the Greeks in their wars, than the hiſtory of their military diſcipline, the detail of which is for the moſt part abſolutely unknown.

[t] Plato in Menex. p. 525.; Ex Heraclide Plut. in Solon. p. 96. C.; Diogen. Laert. in Solon. lib. 1. ſegm. 55. p. 34.

[u] Plut. in Solon. p. 96. C.; Diog. Laert. in Solon. lib. 1. ſegm. 55. p. 34.

[w] See Diod. l. 15. p. 36.; Cornel. Nepos, in Iphicrate, n. 1. Iphicrates commanded the armies of Athens about the year 356 before J. C.

BOOK

BOOK VI.

Manners and Cuſtoms.

ARTS are perfected, and commerce extended, only in proportion as a paſſion for luxury, a taſte for magnificence, and the love of pleaſure gain ground amongſt the people. What has been premiſed of the ſtate of the arts, and of the progreſs of commerce and navigation, in the ages which are the object of this third part of our work, muſt have given the reader ſome foreſight of the inclinations and manner of living, in thoſe times, of the nations we are going to entertain him with.

Hitherto I could only ſpeak in a manner very vague and general of the manners of the greateſt part of the nations of Aſia. The Babylonians even, and the Aſſyrians, whoſe monarchy is ſo ancient, that the original of it ariſes to the ages neareſt the deluge; the Babylonians and Aſſyrians could furniſh nothing for the firſt, nor for the ſecond part of my work. How, in effect, could I treat of their manners, in ages where the hiſtory of theſe nations is abſolutely unknown to us? The aſſiſtance we receive from ancient writers for the times now in queſtion, will make us amends for that involuntary ſilence. I ſhall ſpeak afterwards of the Medes: the origin and termination of the monarchy of theſe people falls exactly within the epocha which at preſent employs us I ſhall enter alſo into ſome detail on the manners of the Lacedæmonians and Athenians. As to the Egyptians, I ſhall ſay nothing of them at preſent, foraſmuch as I thought proper to relate in the firſt part whatever might concern the manners and cuſtoms of that people. I may indeed allow myſelf ſome reflections on their genius and diſtinguiſhing character. A nation ſo famous in antiquity as the Egyptians, well deſerves that we ſhould be taken up with it more than once.

CHAP.

CHAP. I.

Of the Aſiatics.

NOthing is more capable of making us conceive to what a height many nations in Aſia had carried luxury and pomp in the ages now in queſtion, than what we read in ſcripture, of the magnificence of the court of Solomon. There we learn, that the Queen of Sheba, although prepoſſeſſed with the ſplendor of that monarch, was nevertheleſs aſtoniſhed at beholding the manner of ſerving his table, the number of his officers, the richneſs of their apartments, and the magnificence of their apparel [a]. All the drinking-veſſels of Solomon were of pure gold, as well as the veſſels of the houſe of the foreſt of Lebanon. I ſpeak not of his throne, nor of the brilliant and ſplendid retinue which attended each time he went to the temple [b]; theſe facts are well enough known. We may ſay, that what we read in ſcripture, and in Joſephus, of Solomon's manner of living, is far beyond any idea we could form of the moſt brilliant and magnificent courts of the univerſe.

It appears, that this taſte for pageantry and magnificence was hereditary in the kingdom of Judah. The princes who occupied that throne till the captivity, held great ſtate, and kept a moſt brilliant court: many officers to ſerve them, a croud of courtiers, eunuchs, ſtately palaces, dreſs and furniture the moſt curious and moſt ſumptuous, &c. It is ſaid of Hezekiah, that he complaiſantly ſhewed the ambaſſadors of the King of Babylon his treaſures, his perfumes, his precious ointments, his jewels and precious veſſels [c]. But I only indicate theſe objects. I have already ſaid, that the hiſtory of the Hebrews does not enter into the plan I have laid down. I go on to the manners of the Aſſyrians, the Babylonians, and the Medes.

[a] 1 Kings c. 10. v. 4. &c. [b] 1 Kings c. 10.
[c] 2 Kings c. 20. v. 13.; 2 Chron. c. 32. v. 27.

ARTICLE

ARTICLE I.

Of the Aſſyrians.

ALthough in the preceding volumes I have often had occaſion to ſpeak of the Aſſyrians, yet hitherto it was not poſſible for me to give any idea of the character and of the manners of this people. We are ignorant of the events which may have happened in the Aſſyrian empire for the greateſt part of its duration. The lights which hiſtory furniſhes into the latter ages which preceded its deſtruction, enable us to enter into ſome details, and to deliver ſome reflections relative to the genius and manners of its inhabitants.

We can ſcarcely judge, at this day, of the manners of the Aſſyrians otherwiſe than by that of their monarchs; hiſtory, in other reſpects, not having tranſmitted to us any particularity, any circumſtance upon this article. But as, in great empires, the people readily enough take the conduct of their princes for their model, there muſt have been a good deal of relation between the manners of the ſovereigns of Aſſyria, and thoſe of their ſubjects. Admitting this principle, we may advance, that very great luxury reigned amongſt the Aſſyrians in the brilliant ages of their monarchy. In effect, although the writers of antiquity have very probably greatly exaggerated the debauches of Semiramis, as well as the effeminacy of Ninias, and of his ſucceſſors down to Sardanapalus; we may nevertheleſs regard their relations as not altogether void of appearance and reality. They had undoubtedly ſome foundation. It is then more than probable, that the monarchs of Aſſyria had a ſeraglio where they paſſed the greateſt part of their life in pleaſures and ſenſuality; that their dreſs and furniture were of the higheſt magnificence, and the moſt curious that were then known;

known; in a word, that pomp and luxury ſurrounded them on all ſides [d].

The Aſſyrians then, according to the principle I have laid down, muſt, in the reign of their laſt monarchs, have been a people greatly addicted to luxury and voluptuouſneſs; vices which appear, ſo to ſpeak, attached to the ſouthern climates of Aſia. I would not however admit as a proof of the depravation of manners of the Aſſyrians, the liberty which in that nation a brother had to marry his ſiſter [e]. I ſhould rather attribute that cuſtom to bad policy, than to the effect of debauchery *. Beſides, we have enough of proofs of the irregularity and licentiouſneſs which reigned in Aſſyria in the ages which now employ us, to leave out facts whoſe principle may appear dubious. What we read in ſcripture of the miſſion which God gave the prophet Jonah, ſuffices to ſhew to what a height debauchery and corruption had then riſen at Nineveh †.

The Aſſyrians were nevertheleſs a brave and warlike nation. We have ſeen, that, for all the diſmembering of their empire by the revolt of the Medes, and by that of the Babylonians, they ſtill maintained themſelves in great power and glory for 144 years [f]. The Aſſyrians even gained after that revolution ſome advantages over the Medes, and over other different people [g]. We muſt therefore regard them as a nation who knew how to unite a taſte for luxury and pleaſures with bravery and military talents. I ſhall alſo add with the ſciences, ſince the Aſſyrians have been placed in antiquity, in the number of nations who paſſed for having firſt obſerved and calculated the courſe of the ſtars [h]. With

[d] See Diod. l. 2. p. 136. 137. 141.; Juſtin, l. 1. c. 3.; Athen. l. 12. c. 7. p. 529. 545.

[e] Lucian de ſacrific. p. 530.

* See what I have ſaid on this ſubject, ſupra, book 1. c. 4. p. 24.

† It is certain, that Jonas lived under Joaſh and Jeroboam II. Kings of Iſrael; but the time at which he was ſent to Nineveh, is not equally known. We may believe it was about the year 800 before J. C.

[f] See book 1. c. 1. p. 5.

[g] See Herod. l. 1. n. 102. l. 2. n. 141.; 2 Kings c. 15. v. 19. 29. c. 16. v. 9. c. 9. v. 5. 6.

[h] Cicero de divinat. l. 1. n. 1.; Diog. Laert. l. 1. Proœm. p. 1. & 2.

reſpect to the arts, we may well judge, that all that could depend upon them muſt have been extremely cultivated amongſt a people whoſe inclinations were ſuch as we have ſeen. This is all we can ſay of the manners and genius of the Aſſyrians. I have ſhewed the reaſon in the beginning of this article.

ARTICLE II.

Of the Babylonians.

IT is not the ſame with the Babylonians as with the Aſſyrians. The inſights which holy ſcripture gives us on one hand, and profane hiſtory on another, into the manners and cuſtoms of this people, enable us to ſpeak of them with a tolerable degree of knowledge and preciſion.

The Aſiatics had in all times a great inclination for pomp, luxury, and effeminacy. The manners of the Babylonians were but too much tainted with theſe eſſential vices. The ſacred books are full of reproaches which God, by the mouth of his prophets, ceaſed not to make againſt Babylon for her depravities. The writers of antiquity give us alſo the ſame idea; but I think we ſhould diſtinguiſh two epochas in the hiſtory of Babylon. I preſume, that the diſorders I have been ſpeaking of, ſhould not be applied to the firſt ages of that monarchy. They reſpect, in my opinion, only the latter times. Corruption of manners was probably introduced amongſt the Babylonians only by the exceſſive power of their empire. As to the reſt, it is in this ſtate, that is to ſay, in the brilliant ages of Babylon, that we are going to conſider the manners of her inhabitants.

The Babylonians, in the times I now ſpeak of, were much addicted to the pleaſures of the table. We know not how far they carried their delicacy in this point, or what it might conſiſt in. All we know is, that in this reſpect debauchery amongſt theſe people went to the greateſt exceſſes, being in general greatly given to wine and drunkenneſs [1]. What

[1] Dan. c. 5. v. 2.; Q. Curt. l. 5. c. 1. p. 271.; Apocalyps. c. 18. v. 14.

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we read in the prophet Daniel, of the feaſt which Balthaſar made for all his court, at the eve of the taking of Babylon by Cyrus, ſuffices to give us an idea of the diſſoluteneſs and licentiouſneſs which reigned in the repaſts of the Babylonians [k]. For, as I have already remarked, in great monarchies, we may judge of the manners of the people by thoſe of their ſovereigns. The looſeneſs of this ſort of feaſts muſt have been ſo much the greater, as women were admitted to them [l]; and as ſupper ſeems to have been the favourite meal of the Babylonians [m]. I conjecture, moreover, that theſe people eat lying upon beds [n].

The dreſs of the Babylonians conſiſted of a tunic of lawn, which they wore next their ſkin. It deſcended in the eaſtern mode to their feet. Above that they put a woollen robe, and again wrapped themſelves in a cloak, the colour of which was extraordinary white. The Babylonians let their hair grow, and covered their heads with a kind of bonnet or turban [o]. They were ſhod with only a ſoal very thin and very light [p]. And for ſtockings, they wore a ſort of drawers or hoſe [q], ſuch, in all appearance, as the eaſtern nations ſtill wear at this day. We know further, that amongſt the Babylonians every one wore a ſignet on his finger, and never went out without having in his hand a ſtaff highly faſhioned; on the top of which there was in relief a pomegranate, or a roſe, or a lily, or an eagle, or ſome other figure; for it was not allowed to carry a ſtaff ſimple and unadorned: they were all to be ſet off by ſome ornament, ſome apparent and diſtinguiſhing mark [r].

The dreſs which I have here deſcribed, was that of the common people. But rich and dignified perſons affected

[k] Chap. 5. [l] Dan. c. 5. v. 2.; Q. Curt. l. 5. c. 1. p. 271.
[m] Dan. c. 5. v. 5. c. 6. v. 18.
[n] See Eſther, c. 1. v. 6.
The Medes and Perſians only are ſpoke of in this paſſage; but we know, that theſe nations had borrowed all their luxury from the Babylonians. See infra, art. 3.
[o] Herod. l. 1. n. 195. [p] Strabo, l. 16. p. 1082.
[q] Dan. c. 3. v. 21.
[r] Herod. l. 1. n. 195.; Strabo, l. 16. p. 1082.

in their cloathing the greateſt nicety and the utmoſt magnificence. They were not contented with ſtuffs of gold and ſilver embelliſhed with dyes and the moſt precious embroidery; they enriched them ſtill further with rubies, emeralds, ſapphires, pearls, and other jewels which the eaſt always furniſhed in abundance [t]. It is, moreover, in the art of embroidering ſtuffs that the Babylonians appear to have particularly excelled [u]. Collars of gold were alſo a part of their finery [x]. It is alſo probable that they wore pendants at the ear of the ſame metal, or of precious ſtones [y]. Such was the dreſs of the men. As to that of the women, we can ſay nothing of it. No author of antiquity that I know of has mentioned it.

Together with the luxury and coſtlineſs of their dreſs, the Babylonians delighted in perfumes, of which they made very great uſe; frequently perfuming the whole body with odoriferous waters [z]. They had even refined, if we may ſay it, upon theſe kinds of voluptuous niceties. The perfume of Babylon was renowned amongſt the ancients for the excellence of its compoſition. They chiefly uſed it during their meals [a].

I know not whether the Babylonians were as ſtudious of magnificence and decoration of houſes within or without, as of luxury and refinement in dreſs. There is nothing to inſtruct us in this article. But there is all ground for thinking, that pomp and opulence ſhone in the palaces of the ſatrapes and other perſons of diſtinction in the court of Babylon. In effect, from what has been ſhown elſewhere of the grandeur and expenſe of works of architecture executed at Babylon, in the ages we are now employed upon [b], we ſhould preſume, that great magnifi-

[t] See the Apocalypſe, c. 18. v. 12. 16.

[u] Plin. l. 8. ſect. 74. p. 476.; Martial. l. 8. epigram. 28. v. 17. l. 14. epigram. 150.

[x] See Sext. Empiric. l. 3. c. 24. p. 177.

[y] Herod. l. 1. n. 195.; Strabo, l. 16. p. 1081.

[z] Id. ibid.

[a] Athen. l. 15. c. 13. p. 692.; Plut. in Artaxerx. p. 1022.

[b] See book 2. chap. 1. p. 62.

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cence reigned in the houſes of that capital. But we are ignorant, as I have ſaid, in what the luxury of the Babylonians, in this reſpect, preciſely conſiſted.

As to the interior decoration of apartments, it appears that theſe people were very curious and very nice in moſt part of their furniture, which, however, was never very conſiderable amongſt the ancients for number or variety. Their greateſt luxury in this article conſiſted in carpets, and in ornamental coverings for chairs and beds. *Pliny* ſpeaking of a carpet fit for covering ſuch beds as the ancients made uſe of at table, ſays, that this piece of furniture, which was produced from the looms of Babylon, amounted to eighty-one thouſand ſeſtertia [b]. We may judge by this ſum of the magnificence and curioſity of this ſort of furniture. The ſcripture alſo makes mention of different veſſels of ivory, of marble, and braſs, with which apartments were adorned at Babylon [c]. It even appears, that many of theſe veſſels were ornamented and enriched with precious ſtones [d]; that is to ſay, that they were intended much leſs for uſe than for luxury, parade, and oſtentation. We may judge from theſe facts, that all which induſtry had then been able to invent for the richneſs of furniture, was greedily ſought out by the Babylonians.

I took care to remark, in the preceding volumes, that chariots had been in uſe in civilized nations from all antiquity. But it is not the ſame with litters, the invention of which I take not to be ſo ancient, nor the uſe of them ſo general as that of cars and chariots. To effeminacy, the ordinary attendant of luxury, we may attribute the invention of litters. This ſort of carriage has been, in effect, but little known except in voluptuous nations. Whatever may have been its origin and antiquity, the cuſtom of being carried in litters and other kinds of vehicles, was practiſed amongſt the Babylonians [e]. Theſe different ſorts of

[b] L. 8. ſect. 74. p. 477. See alſo Mart. l. 14. epigram, 150. Theſe eighty-one thouſand ſeſterces come to 14,364 livres 12 s. $\frac{5}{64}$ d. of French money.

[c] Apocalypſ. c. 18. v. 12. [d] Apocalypſ. ibid.

[e] Herod. l. 1, n. 199.; Apocalypſ. c. 18. v. 13.

conveniencies.

conveniencies could not eſcape a people ſo ſenſual, and ſo fond of the comforts of life, as the inhabitants of Babylon were become in the ages I now ſpeak of.

We can ſpeak but very imperfectly of the pleaſures and amuſements of the Babylonians. Antiquity has tranſmitted nothing particular upon this article. We can only conjecture that theſe people had a great taſte for muſic. The ſcripture expreſsly marks it. There we even find a pretty large detail of the different kinds of inſtruments in uſe amongſt the Babylonians[f]. But then this is all we can ſay upon that ſubject. For it is not poſſible at this day to ſpecify what were the inſtruments ſpoke of in ſcripture, or how they were played upon.

We ſhould alſo place hunting in the number of the diverſions of the Babylonians[g]. Theſe people were ſo paſſionately fond of this exerciſe, and eſteemed it ſo great a pleaſure, that, preferably to any other ſubject, they choſe hunting-pieces of painting for their apartments[h]. They even carried their taſte for this kind of repreſentations ſo far, as to have them embroidered on their cloaths and on their furniture[i]. The pleaſures of the table, muſic, and hunting, are all that we know of the diverſions which may have been in uſe at Babylon. Though I do not doubt but we may add dancing, for all there is no mention made of it in ancient writers.

As to the rules of decorum and common practices of civil life, I remark as an exception to the general maxims of the Aſiatics, that, amongſt the Babylonians, the women were not ſhut up in the inner apartments. It appears on the contrary, that they lived familiarly with the men. They were not only admitted to public feaſts[k]; they were alſo permitted to ſee ſtrangers, and to eat with them[l].

[f] Dan. c. 3. v. 5.; Apocalyps. c. 18. v. 22. See alſo Q. Curt. l. 5. c. 1. p. 264. 265.

[g] Xenoph. Cyrop. l. 1. p. 9. 10.; Nicol. Damaſcen. in excerpt. Valeſ. p. 435.

[h] Diod. l. 2. p. 122.; Ammian. Marcell. l. 24. c. 6. p. 406. 407.

[i] Plaut. in Pſeud. act. 1. ſcen. 2. v. 14.; Athen. l. 12. c. 9. p. 538. D.

[k] Dan. c. 5. v. 2.; Q. Curt. l. 5. c. 1. p. 271.

[l] Q. Curt. *loco cit.*

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Yet for all this the Babylonians had eunuchs, and even in great numbers [m]. This conduct, I own, affords a contraſt difficult enough to account for. But it is not the only inſtance of the contradictions to be found in the manners of the different nations of this world. Let us now take a general view of the characters and genius of the inhabitants of Babylon.

The Holy Spirit, by the mouth of the prophets, often reproaches them with great pride and hardneſs of heart, joined to an exceſſive love of pleaſure [n]. As to pride and vain-glory, this vice was not peculiar to the Babylonians. The orientals, in all times, ſeem to have been affected with much haughtineſs and vanity. But theſe ſentiments muſt have ſtill increaſed amongſt the Babylonians, from the ruin and the total deſolation of the ancient empire of Aſſyria. From that epocha they undoubtedly deſerved but too well the reproaches of pride and vanity which Iſaiah and the other prophets inceſſantly make them. Theſe people were then intoxicated with the ſplendor and formidable power of their monarchy.

As to hard-heartedneſs, it is clear from the ſcripture, that this reproach is due to them, only for the manner they treated the Jews ſubjected to their dominion. They had, in this reſpect, cruelly abuſed the advantages which God had given them over this ungrateful and unfaithful people [o]. Beſides, I do not think that hardneſs of heart was the characteriſtic and eſſence of the genius of the Babylonians. They appear, on the contrary, to have been of a character mild and humane enough, ſuch as is common to nations addicted to pleaſures, and given up to voluptuouſneſs. I even think, that, independent of this reflection, we may find a proof of what I advance in a cuſtom whoſe eſtabliſhment we muſt attribute to ſentiments of mildneſs and humanity. Every year, for five days of a

[m] 2 Kings c. 20. v. 18.; Dan. c. 1. v. 3.; Joſ. antiq. l. 10. c. 16.

[n] See Iſaiah, c. 13. v. 19. c. 14. v. 13. &c. c. 47. v. 6. 7. 8.; Apocalypſe, c. 18. v. 3.

[o] See ſupra, book 2. c. 1.

certain

certain month, they celebrated at Babylon a feaſt, during which the ſlaves changed places with their maſters, having a right to command, and to be ſerved by them. They even choſe one ſlave in every houſe, who, during all the time of the feaſt, was held for the head of the family, and wore, in conſequence, a diſtinguiſhed habit [p]. This cuſtom appears to intimate a fund of mildneſs and principles of humanity very diſtant from that harſhneſs with which we know the ancients commonly treated their ſlaves *.

It is not poſſible to juſtify the Babylonians equally from the accuſation of an inordinate propenſity to pleaſures, and the moſt extravagant debauchery. Babylon, towards the end of the ages I now ſpeak of, was gorged with riches. They produced the ſame effects there, as they have produced in all times amongſt all nations; diſſoluteneſs and corruption of manners, the conſtant train of luxury and effeminacy. The ſacred writers deſcribe Babylon as a city plunged in the moſt ſhocking lewdneſs [q]; and profane authors own, that there never was a more corrupted city [r]. They made a particular ſtudy of all that could delight the ſenſe and excite the moſt ſhameful paſſions [s]. After this portrait of the manners of Babylon, let us not wonder that we ſee that city ſo often deſigned, in the allegorical language of the ſacred writers, under the name of the *great whore*.

Moſt of the writers who have had occaſion to ſpeak of the lewdneſs and licentiouſneſs which reigned at Babylon, have not failed to attribute the principal cauſe of them to a religious ceremony obſerved amongſt theſe people from time immemorial; a cuſtom which, for that reaſon, it is neceſſary to lay open, with all the details and circumſtances which hiſtory has been able to tranſmit to us upon this ſubject.

[p] Beroſ. apud Athen. l. 14. cap. 10. p. 639. C.

* I would not, however, affirm that the cuſtom I have here ſpoke of, had place in the ages now in queſtion. It may have been only an imitation of the Saturnalia, and introduced among the Babylonians after the conqueſts of Alexander. We know that Beroſus is poſterior to that event.

[q] Iſaiah, c. 13. v. 19.; Apocalypſe, c. 18. v. 3.

[r] Q. Curt. l. 5. c. 1. p. 271. [s] Id. ibid.

By

By a law, founded upon an oracle, it was ordained for all women to repair once in their lives to the temple of Venus, and there proſtitute themſelves to ſtrangers [t]. Here is the ceremonial which was obſerved upon theſe occaſions. Every woman, on arriving at the temple of the goddeſs, ſat down, having her head crowned with flowers. In that edifice, there were many galleries and windings where the ſtrangers remained, whom the love of debauchery never failed to draw thither in great numbers. They were permitted to chuſe her they liked beſt amongſt all the women who came to ſatisfy the law. The ſtranger was obliged, when he accoſted the object of his choice, to give her ſome pieces of money, and to ſay when he preſented it, "I "implore for thee the goddeſs Mylitta [*]." He then led her to a retired place out of the temple, and ſatisfied his paſſion. The woman could not reject the ſum which was offered her, however ſmall it might be, becauſe it was a point of religion. Neither was ſhe permitted to refuſe the firſt ſtranger that offered himſelf. She was obliged to follow him, of whatever condition he might be [u].

As ſoon as the women had ſatisfied the law, they offered, according to the cuſtom preſcribed, a ſacrifice to the goddeſs, and then they were at liberty to return to their houſes; for when a woman had once ſet foot in the temple, ſhe was not permitted to leave it without having fulfilled the obligation impoſed upon her by the law [x].

This obligation, moreover, was not exactly in force, except amongſt the common people, and thoſe of low condition. Women diſtinguiſhed by their rank, their birth, or their riches, had found means to elude the law. They cauſed themſelves to be carried in their litter to the entrance of the temple; there, after having taken the precaution to ſend back all their attendants, they preſented themſelves for a moment, and for form only [y], before the

[t] Herod. l. 1. n. 199.; Strabo, l. 16. p. 1081.
[*] This is the name the Babylonians gave to Venus. Herod. l. 1. n. 199.
[u] Herod. l. 1. n. 199.; Strabo, l. 16. p. 1081.
[x] Herod. ibid. [y] Herod. ibid.

ſtatue of the goddeſs; they then immediately left the temple, and returned home.

This religious cuſtom, this obligation impoſed upon all women, of proſtituting themſelves publicly once in their lives, has been regarded, as I have already ſaid, by all the writers who have had occaſion to treat of the manners of the Babylonians, as the perpetually ſubſiſting cauſe and principle of the depravation and extreme licentiouſneſs to which theſe people were abandoned. I dare affirm, however, that this cuſtom, which at firſt ſight appears ſo ſhocking, owed perhaps its origin leſs to corruption and diſorder, than to the ideas with which the ancients were prepoſſeſſed on the ſubject of the Divinity. Let us try to maintain this propoſition.

The ancients, whoſe philoſophical ideas were neither very juſt nor very ſublime, regarded the gods as beings in ſome ſort jealous of the happineſs of men [z]. They were particularly perſuaded in regard to Venus, that this goddeſs inſtigated the ſex to impurity and diſorder [a]. It is for that reaſon, that they ordinarily placed her temples without the cities [b]. We ſee alſo, that maids, and even widows intending ſecond marriages, did not fail, before their nuptials, to offer ſacrifices to Venus in order to render her propitious [c]. For I repeat it, the ancients were intimately perſuaded, that this goddeſs delighted in throwing the ſex into diſorders and debauchery.

From theſe facts, which are very certain and undoubted, I think, that the law which, amongſt the Babylonians and other people [d], ordained women once in their lives to proſtitute themſelves to a ſtranger in the temple of Venus; I think, I ſay, that this law, far from having been eſtabliſhed

[z] Herod. l. 1. n. 32. l. 3. n. 40.

[a] See Hom. Iliad. l. 24. v. 30.; Odyſſ. l. 4. v. 261. 262.; Plut. t. 2. p. 146. D. p. 310. F.; Ovid. metam. l. 2. v. 238. &c. Faſtor. l. 4. v. 157.; Appollodor. l. 1. p. 7.; Hygin. fab. 58.; Martial. l. 2. epigram. 84.; Pauſan. l. 9. c. 16. p. 742.; Parthen. Erot. c. 5.; Schol. Hom. ad Iliad. l. 5. v. 412.; Valer. Maxim. l. 8. c. 15. § 12.

[b] Vitruv. l. 1. c. 7. [c] Pauſ. l. 2. c. 34.

[d] See Herod. l. 1. n. 199.; Ælian. var. hiſt. l. 4. c. 1.; Strabo, l. 11. p. 805.; Juſtin. l. 18. c. 5.

to favour debauchery, was on the contrary contrived to prevent it. Here are the reaſons on which I think this opinion may be eſtabliſhed.

The authors of the law I ſpeak of, convinced, that Venus was an envious and malevolent divinity, ſought ſuch means as they thought the moſt proper to ſecure the honour of the ſex from the caprices and from the malignity of that goddeſs. It was undoubtedly in the view of appeaſing and ſatisfying her, that they contrived the kind of ſacrifice I have ſpoke of. They wanted ſo to ranſom the virtue of the women, and inſure their chaſtity for ever, by cauſing them to make one deviation, with which they flattered themſelves, that Venus would content herſelf, and, of conſequence, leave theſe victims in tranquillity the reſt of their life.

I ſhall again attribute to the ſame principle, that is to ſay, to the deſire of averting the influences of a malignant divinity, what we read of the cuſtom they had in many countries, of conſecrating to proſtitution a certain number of women and maids [e]. They wanted, in all appearance, to obtain by this kind of offering, that all the reſt of their women and maids ſhould lead a chaſte and regular life.

I think moreover, that we find a ſtrong proof of what I advance upon the end and motives of this inſtitution, in Juſtin's manner of ſpeaking of it. This author ſays, that, from time immemorial, it was a cuſtom in Cyprus to ſend maids to the ſea-ſhore on certain days, there, by proſtitution, to offer their virginity to Venus as a tribute they paid her for the reſt of their life [f]. We may affirm, that the Babylonians had the ſame intention, when they contrived the religious cuſtom which my readers have juſt ſeen. I draw a proof of it from the words which the ſtranger accoſting a woman was obliged to pronounce: "I implore for thee the "goddeſs Venus." Does not this form of prayer clearly indicate the end and motives of theſe ſingular ſervices? What Herodotus adds immediately after, completes what is neceſ-

[e] Strabo, l. 6. p. 418. l. 11. p. 805. l. 12. p. 837.

[f] *Pro reliqua pudicitia libamenta Veneri ſoluturas.* l. 18. c. 5. See alſo Auguſtin. de civit Dei, l. 4. c. 10.

ſary to confirm the idea I have given of them. This great hiſtorian has taken care to remark, that the women of Babylon having once fulfilled the obligation impoſed by the law, were not after that to be ſeduced by any offer that could be made them [g]. Ælian ſays as much of the women of Lydia, a country where the ſame law was eſtabliſhed [h]. In fine, let us add, that, amongſt the nations where it was cuſtomary to conſecrate, to proſtitution in the temple of Venus, a certain number of maids, there was no body who did not think himſelf honoured by eſpouſing them [i].

Do not theſe facts ſuffice to deſtroy all the inferences which they would draw from the religious cuſtom I have related, againſt the manners of the Babylonians? If corruption did prevail amongſt theſe people, we ought to attribute it to quite another cauſe. I even doubt whether depravation of manners was carried to the utmoſt exceſs in the ages which employ us at preſent. In my opinion, it was not till afterwards. Herodotus tells us, that, after the taking of Babylon by Cyrus, the inhabitants falling into indigence and miſery, made no ſcruple of proſtituting their daughters for profit [k]. Quintus Curtius ſays as much. He even adds, that huſbands were not aſhamed of abandoning their wives to ſtrangers for money [l]. But what Quintus Curtius ſays of the manners of the Babylonians, regards only the age of Alexander, an age diſtant enough from thoſe which are the object of this third part of our work. Then, according to Herodotus, the Babylonians having been already a long time fallen from their ancient ſplendor, were become a people as vitious as contemptible.

I have remarked in the preceding article, ſpeaking of the Aſſyrians, that theſe people had known how to unite bravery, and a taſte for the ſciences, to the moſt determined propenſity to luxury and voluptuouſneſs. We may ſay as much of the Babylonians, and with ſtill more reaſon. All

[g] L. 1. n. 199. [h] Var. hiſt. l. 4. c. 1.

[i] Strabo, l. 11, p. 805.; Val. Maxim. l. 2. c. 6. § 15.; Auguſt. de civit. Dei, l. 4. c. 10.

[k] L. 1. n. 196. [l] L. 5. c. 1. p. 271

antiquity

antiquity has given teſtimony to their valour and military talents. Xenophon, a very competent judge in ſuch a matter, ſays expreſsly, that the eaſt had no better ſoldiers than thoſe of Chaldea [m]. As to their exploits, the holy ſcripture on one hand, and profane hiſtory on the other, ſpeak too often of them to leave any neceſſity of inſiſting upon them. In the laſt place, it was the Babylonians who conjunctly with the Medes took Nineveh, and deſtroyed the empire of Aſſyria [n]; a conqueſt which I preſume to have been fatal to theſe two nations; ſince, according to all appearance, it is from this epocha, that luxury and corruption of manners began to be introduced amongſt them. I ſhall examine this queſtion more particularly in the article of the Medes [o].

As to the taſte of the Babylonians for the ſciences, we know, that, by the agreement of a great number of ancient writers, the honour of having found their firſt principles, and given the firſt precepts in them, was due to the Chaldeans [p]. I do not think it neceſſary to inſiſt further upon this ſubject at preſent, having enlarged upon it elſewhere, giving an account of the diſcoveries and of the progreſs which the moſt ancient nations had made in the ſciences [q].

Neither is it neceſſary to ſay much upon the genius of the Babylonians for the arts. What has been ſhown before of the works, and of the embelliſhments of Babylon, and of the ſkill of the inhabitants in caſting metals [r], joined to what has been juſt ſaid of the luxury and magnificence of their dreſs, puts it beyond a doubt, that there muſt have been excellent artiſts in all kinds at Babylon. I think we may affirm, that, for all that depends upon induſtry and workmanſhip, the Babylonians yielded to no people that were then known.

I finiſh the draught of the character of the Babylonians by the beſt grounded reproach which can be made that nation. They were ſingularly beſotted with judicial

[m] Cyrop. l. 3. p. 150.
[n] See ſupra, book 1. c. 1. p. 6. & 7. [o] See infra, art. 3.
[p] Cicero de divinat. l. 1. n. 41.; Diod. l. 2. p. 142.; Strabo, l. 1. p. 43.
[q] Supra, book 3. p. 96. & 120. [r] Supra, book 2. c. 1. p. 61. 62.

aſtrology,

aſtrology, and, in general, much addicted to occult ſciences. The Chaldeans, whom we ought to regard as the learned of Babylon, employed themſelves in aſtronomy only with a view of reading in the ſtars the deſtinies of men and of empires. They pretended to have attained it; and it is impoſſible to carry credulity higher in that reſpect, than it was carried by the Babylonians[r]. It appears further, that, not content with ſeeking to penetrate the dark clouds of futurity, by ſtudying the different aſpects of the ſtars and planets, the Chaldeans were greatly addicted to ſorceries and inchantments. The ſtudy of magic, after that of judicial aſtrology, was their principal occupation[s]. They boaſted themſelves able to avert misfortunes which threatened, and procure all good fortune, by their expiations, their ſacrifices, and their magical ceremonies[t]. The Eternal, by the voice of his prophets, often derides that blind confidence which the Babylonians placed in their magi and in their aſtrologers[u], a confidence which all profane authors equally atteſt. Theſe reproaches ſo often and ſo generally repeated, make it certain, that the Babylonians were an exceſſively credulous and ſuperſtitious nation. This is moreover a weakneſs to which the Aſiatics appear in all ages to have been particularly ſubject. There is no country, which even in our days preſents ſuch a jumble of ſuperſtitions and religious practices, each more extravagant and more ridiculous than the other.

From all the different traits that I have thrown together under this article, it reſults, that the Babylonians, in the brilliant ages of their monarchy, were a very poliſhed, brave, and ingenious people, with great taſte and talents for the arts and ſciences; but withal very vain-glorious, greatly addicted to luxury and pleaſure; in fine, very ſuperſtitious and very credulous; vices which, I have already ſaid, did not form

[r] See Iſaiah, c. 47. v. 13.; Cicero de divinat. paſſim.; Diod. l. 2. p. 142. &c.

[s] Iſaiah, c. 47. v. 9. 12.; Ezek. c. 21. v. 21.; Dan. c. 1. v. 20. c. 2. v. 2. c. 3. v. 7.

[t] Diod. l. 2. p. 142. See Stanley hiſtoria philoſophiæ, part 12. ſect. 1. 12. & 11. 23. [u] See Iſaiah, c. 47. v. 11. 15.

the

the particular character and genius of the Babylonians, but in general that of all the eaſtern nations. What in that reſpect they were in all times, they ſtill continue to be at this day.

ARTICLE III.

Of the Medes.

WE have handed down to us a good many particular and direct informations relating to the manners of the Medes, and we are ſtill more enabled to judge of them by conſidering thoſe of the Perſians, of which very minute details are to be found in the writers of antiquity. In effect, it is certain, that the Perſians had borrowed from the Medes that luxury and effeminacy, which diſgraced them ſo much in the latter times of their empire [y]. Thus, the facts which antiquity has tranſmitted concerning the manner that the Perſians lived in the brilliant ages of their monarchy, may equally ſerve to give us a very juſt idea of the manners and cuſtoms of the Medes.

The Medes were originally a very ſimple and unpoliſhed people. The firſt notice that hiſtory takes of them, is to tell us that they were ſubjected by the Aſſyrians under the reign of Ninus [z]. We ſee them ſupport that ſubjection patiently for many ages, and afterwards throw off the yoke, without knowing very well how or at what time theſe people obtained their deliverance from the dominion of the Aſſyrians [a].

Whatever may have been the epocha and circumſtances of this famous revolution, the Medes, after ſome years of confuſion and anarchy, elected a king [b]. This prince, named *Dejoces*, applied himſelf to civiliſe his new ſubjects. He built Ecbatana, which he made the capital of his kingdom, and even embelliſhed it with a good deal of magni-

[y] Herod. l. 1. n. 135.; Xenophon. Cyrop. paſſim; Strabo, l. 11. p. 797. & 798.

[z] Diod. l. 2. p. 114. [a] See *ſupra*, book 1, c. 1. p. 5. [b] Ibid. c. 3. p. 9.

ficence

ficence [c]. We may judge, that in general Dejoces had a great taſte for pomp and ſhew. It is evident from all his conduct [d]; and it is probable that he inſpired his ſubjects with the ſame ſentiments. This however is all we can ſay of the manners of the Medes during the reign of Dejoces. Hiſtory has tranſmitted nothing particular concerning them.

From that epocha, that is, from the year 710 before Jeſus Chriſt, the hiſtory of the Medes begins to clear up, and be better known to us. We ſee a train of kings ſucceed each other for two hundred years, till the moment that Cyrus united in his own perſon the crowns of Media and Perſia. It is in the reign of Aſtyages, grandfather of this prince, and of Cyaxares the laſt king of the Medes, that we are about to conſider the manners of that nation.

Of all the nations ſpoke of by the writers of antiquity, the Medes are thoſe who appear to have been the moſt exclaimed againſt for their luxury, their pageantry, and their effeminacy [e]. The luxury of theſe people ſhone principally in the ſumptuouſneſs and magnificence of their dreſs. They wore long flowing robes with large hanging ſleeves. This ſort of dreſs was very graceful; and as it was in general very full and flowing, it was very proper to conceal the defects of the ſhape [f]. Theſe robes were moreover woven with different colours, each more ſhining than the other, and richly embroidered with gold and ſilver [g]. As to the head-dreſs, the Medes let their hair grow, and covered their heads with a tiara, or kind of pointed cap, very magnificent [h]. They were, beſides, loaded with bracelets, gold chains, and necklaces adorned with precious ſtones [i]. The Medes, in fine, carried their niceneſs in dreſs ſo far as to tinge their eyes and eyebrows,

[c] Herod. l. 1. n. 98. [d] See Id. ibid.
[e] See Athen. l. 12. p. 512.; Tertullian. de cultu femin. l. 1. p. 152.
[f] Xenoph. Cyrop. l. 8. p. 122.; Diod. l. 2. p. 119.; Juſtin. l. 1. c. 2. l. 41. c. 2. Strabo, l. 11. p. 797.
[g] Herod. l. 1. n. 111. Xenoph. Cyrop. l. 8. p. 126.
[h] Xenoph. l. 8. p. 127.; Plut. de Fort. Alex. p. 329. 339.
[i] Id. ibid.

paint

paint their faces, and mingle artificial with their natural hair [k]. Such was the attire of the men. As to that of the women, we can ſay nothing certain about it. Ancient writers give us no lights into this article. They only tell us that in Media the ſex was remarkably beautiful [l].

The luxury of the table amongſt the Medes was equal to that of dreſs. In a feaſt which Aſtyages gave to Cyrus, there was the utmoſt profuſion, as well in the quality as the variety of cookery and diverſity of meats [m]. We ſee alſo that theſe people employed the precaution of eſſaying the drink that was preſented to the king. The cupbearer, before he preſented the cup, poured ſome drops into the hollow of his left hand, and taſted it [n].

It would be curious enough to know, in what preciſely conſiſted the delicacy and magnificence of the Medes in reſpect to the luxury of the table. But I already ſaid that ancient writers have entered into no detail upon this article. I am of opinion, that no very high idea ſhould be formed of the talent of theſe people for the elegance and delicacy of good cheer. I judge ſo from the manner of eating in uſe at this day throughout all the eaſt. We know that the art of cookery is there in very narrow bounds; and I think, that in this reſpect it has been the ſame in all times. For, as I have more than once had occaſion to obſerve, cuſtoms have varied very little amongſt the orientals.

However that may be, debauches at table were exceſſive amongſt the Medes. They got drunk at it very frequently. The monarchs were no more reſerved upon this article than the loweſt of their ſubjects [o]. Hiſtory has preſerved one inſtance of their intemperance, too ſtriking to be paſſed over in ſilence. In the war which

[k] Xenoph. Cyrop. l. 1. p. 5. This ſort of paint conſiſted in a dark colour, with which the ancients tinged their eyebrows and eyelids, to make their eyes appear larger and more lively.

[l] Xenoph. Cyrop. l. 5. p. 50; Anabas, l. 3. p. 130.

[m] Xenoph. Cyrop. l. 1. p. 5. [n] Xenoph. Cyrop. l. 1. p. 6.

[o] Xenoph. l. 1. p. 6.

Cyaxares, the laſt of the Median kings, made againſt the Babylonians, Cyrus, who had joined his arms to thoſe of that prince, finding a favourable occaſion of beating the enemy, ſet out at night, at the head of all the cavalry. Cyaxares, on the contrary, paſſed that ſame night in a debauch, and carried it ſo far as to get drunk with all his principal officers [p].

Muſic, amongſt the Medes, was called in to heighten the pleaſures of the table. They ſung and played freely upon inſtruments. The monarchs themſelves took part in this diverſion, and generally in all that could animate feſtal jollitry [q]. Dancing alſo may be reckoned amongſt the pleaſures of the Medes; they gave into it with great ardor and tranſport [r].

Hunting was alſo one of the exerciſes which employed the ſovereigns of Media the moſt agreeably. In order to take this pleaſure with the more facility, they had even taken care to incloſe large parks, in which were kept lions, boars, leopards, and ſtags [s].

It is impoſſible to ſay any thing certain of the manner in which the houſes of the Medes may have been built. We can only conjecture, that theſe people made a great part of the decorations of their edifices conſiſt in the diverſity of colours with which they painted them on the outſide. I think I may propoſe this conjecture from what Herodotus relates of the walls of Ecbatana. That city was incloſed with ſeven circuits of walls, diſpoſed in ſuch a manner, as that from without, the firſt did not intercept the view of the entablature of the ſecond, the ſecond of the third, and ſo on of the reſt. The battlements of the firſt wall were painted white, thoſe of the ſecond black, of the third purple, of the fourth blue, of the fifth orange; and of the two laſt circuits, the battlements of one was gilded with ſilver, the other with gold [t]. From theſe facts I

[p] Xenoph. Cyrop. l. 4. p. 62.
[q] Xenoph. Cyrop. l. 1. p. 6, l. 4. p. 62. [r] Ibid. l. 1. p. 6.
[s] Ibid. l. 1. p. 7, 8, & 9. [t] L. 1, n. 98.

imagine

imagine, that the Medes were probably in uſe to paint the outſide of their houſes with different colours; a cuſtom which we know to be practiſed at this day in ſeveral countries.

As to the interior decoration of apartments amongſt theſe people, we can ſpeak of it but imperfectly. Only I think we may affirm that tapeſtry was in uſe amongſt the Medes. This ſort of furniture was in effect known to the Perſians [u]; and we know that the Perſians had borrowed from the Medes all that could contribute to luxury and magnificence [x]. We may even ſay that tapeſtry could not be merely a matter of luxury amongſt the Medes. Media is in general a pretty cold country, and for that reaſon the cuſtom of lining apartments with tapeſtry muſt have been both very uſeful and very neceſſary.

At the court of Ecbatana ſhone particularly that pomp and magnificence of which ancient writers give us ſo high an idea. If their teſtimony is to be admitted, it was even from the Medes that moſt of the eaſtern nations had borrowed the ceremonial which was obſerved at the courts of the ſovereigns of that part of the world [y]. We may judge of the exterior pomp that ſurrounded the perſon of the kings of Media, by that ſuperb cavalcade of which Cyrus thought fit to give a ſpectacle to his newly-conquered ſubjects. The preparations of that feaſt were entirely ordered according to the cuſtoms of the Medes [z]. In fine, we ſhall form a ſtill higher idea of the grandeur and ſumptuouſneſs which reigned at the court of the ſovereigns of Media, if we recollect the manner that the writers of antiquity ſpeak of the magnificence which ſhone at the court of the kings of Perſia; for, as I have already ſaid, the ceremonial obſerved at the court of the kings of Perſia, was only an exact and faithful imitation of that of the kings of Media.

[u] Plut. in Themiſt. p. 126. 127.; In Artax. p. 1026.; Tertullian. de cultu femin. l. 1. p. 152.

[x] Strabo, l. 11. p. 797.; Xenoph. Cyrop. l. 8. p. 142.

[y] Strabo, l. 11. p. 797. & 798. [z] Xenoph. Cyrop. l. 8. p. 126. &c.

It is alſo from the Medes that the Perſians had received that profound veneration which they felt for the perſons of their kings [a]. The reſpect which the Medes bore their ſovereign was ſuch, that they durſt not ſpit, nor even laugh in his preſence [b]. His orders were always ſpeedily and punctually executed.

The hiſtory of the Medes is not enough known for us to be able to ſpeak with any exactneſs of the cuſtoms which they obſerved in the ordinary courſe of civil life. I ſhall only remark in the manners of this people, one ſingularity, well worthy of notice. In certain cantons of Media, polygamy was not only permitted; it was even authoriſed by an expreſs law, which ordained every inhabitant to marry and maintain at leaſt ſeven wives. In other cantons it was preciſely the contrary. A woman was allowed to have many huſbands, and they looked with contempt on thoſe who had leſs than five [c].

As to the particular character of the Medes, we may affirm it in general to have been very brave and very warlike. I have already ſaid, that they paſſed for the firſt people of Aſia who had introduced diſcipline into armies [d]. We know alſo, that the Medes had taught the Perſians the art of war, and particularly, to handle the bow and the javelin with dexterity [e].

I do not think, that the Medes ever made themſelves very remarkable for ſkill in the ſciences. My authority for thinking ſo, is, that they are no where quoted in the number of nations amongſt whom the ſciences were anciently ſeen to flouriſh.

As to arts and manufactures, it is to be preſumed, that whatever related to them was carefully ſought out by the Medes. It cannot even be doubted, after what we have ſeen

[a] Strabo, l. 11. p. 797. [b] Herod. l. 1. n. 99.

[c] Strabo, l. 11. p. 798. To this day in ſeveral cantons of India women are permitted to have many huſbands. Voyage de Franc. Pyrard, p. 274.; Lettr edif. t. 10. p. 22.

[d] Supra, book 5. c. 1. p. 164. [e] Strabo, l. 11. p. 797.

of

of their ruling taſte for pomp and magnificence, luxury and effeminacy.

I ſhould think as to the reſt, that vain-glory and effeminacy, vices which the Medes are ſo often taxed with by all the writers of antiquity, did not begin to be introduced into that nation, and to corrupt its manners, till after the deſtruction of the empire of Aſſyria. Till that time, the Medes did not form a monarchy powerful and opulent enough to abandon themſelves to luxury and pleaſures. Beſides, before this event they ſaw themſelves ſurrounded on all ſides with powerful and warlike enemies, (the Aſſyrians and Babylonians), who forced them to be vigilant and attentive to avoid becoming quickly their prey. The Medes in this poſition had too many meaſures to guard, and too many precautions to take, to allow them to abandon themſelves with exceſs to luxury and ſenſuality. But the monarchs of Media, by overturning the throne of Nineveh, delivered themſelves from a dangerous neighbourhood, which however was neceſſary to render their ſubjects active and vigilant. In fine, the riches with which theſe princes and their troops glutted themſelves at the ſack of Nineveh, and above all, the daily and habitual communication with a ſoft and voluptuous people, ſuch as were then the Aſſyrians, corrupted their manners, and made them ſoon degenerate from thoſe of their anceſtors. What gave the finiſhing ſtroke to the Medes, was their union and incorporation with the Perſians under Cyrus. From that epocha, there is no more mention of the Medes in hiſtory.

CHAP. II.

Of the Egyptians.

IN the preceding volume, and even in this one, I have laid before my readers, under different articles, all that might concern the laws, arts, ſciences, manners, and cuſtoms of the Egyptians. But I deferred till now the reſuming all theſe

theſe different objects, and the bringing them under one and the ſame point of view, to draw, in conſequence, one general and collective picture of the character of the Egyptians, and to make known the particular genius of that nation. I take this to be the place to preſent at one view, and under the ſame aſpect, all the different traits that antiquity may have furniſhed upon this object. I ſhall explain then in few words, the idea I have been able to form of the Egyptians, and ſhall trace from facts the character of this people, ſo boaſted of in all ages.

The Egyptians rendered themſelves famous in antiquity by their laws, their arts, and their ſciences. In effect, that nation becoming quickly civilized, made, in conſequence, ſome early diſcoveries, and even a pretty rapid progreſs in ſeveral branches of the arts and ſciences. This merit ſhould not be denied the Egyptians: but otherwiſe, I ſee nothing that can ſerve to diſtinguiſh them in a manner very advantageous; I even think myſelf authoriſed to refuſe them the greateſt part of the elogies that have been always ſo liberally beſtowed upon them.

The Egyptians did invent ſome arts and ſome ſciences, but they never had the ingenuity to bring any of their diſcoveries to perfection. I have expoſed their want of taſte, and I venture to ſay of talent, in architecture, in ſculpture, and in painting [f]. Their manner of practiſing phyſic was abſurd and ridiculous [g]. The knowledge they had of aſtronomy and geometry, was but very imperfect. Their diſcoveries are far enough from entering into any compariſon with thoſe which the Greeks made afterwards in theſe two ſciences. In fine, the Egyptians have had neither genius, ardor, nor talent for commerce, or for the marine and art-military.

As to civil laws and political conſtitutions, the Egyptians had indeed ſome very good ones; but otherwiſe there reigned in their government, a multitude of abuſes and eſſential

[f] Supra, book 2. c. 2. [g] See part 2. book 3. c. 2. art. 1.

defects,

defects, authoriſed by the laws and by their fundamental principles of government [h].

As to the manners and cuſtoms of this people, we have ſeen to what a height indecency and debauchery were carried in their public feaſts and religious ceremonies [i]. The public cult which a nation fixes to honour the Deity, bears the ſtamp of that nation's character; neither was the morality of the Egyptians extremely pure; we may even affirm, that it offended againſt the firſt rules of rectitude and probity. We ſee, that the Egyptians bore the higheſt blame of covetouſneſs, of ill faith, of cunning, and of roguery [k].

It appears to me to reſult from all theſe facts, that the Egyptians were a people induſtrious enough, but as to the reſt, without taſte, without genius, without diſcernment. A people who had only ideas of grandeur ill underſtood, and whoſe progreſs in all the different parts of human knowledge never roſe beyond a flat mediocrity. Knaviſh into the bargain, and crafty, ſoft, lazy, cowardly, and ſubmiſſive; and who having performed ſome exploits to boaſt of in diſtant times, were ever after ſubjected by whoever would undertake to ſubdue them. A people, again, vain and fooliſh enough to deſpiſe other nations without knowing them [l]. Superſtitious to exceſs [m], ſingularly addicted to judicial aſtrology [n], extravagantly beſotted with an abſurd and monſtrous theology [o]. Does not this repreſentation ſufficiently authoriſe us to ſay, that all that ſcience, that wiſdom, and that philoſophy ſo boaſted of in the Egyptian prieſts, was but impoſture and juggling, capable of impoſing only on people ſo little enlightened, or ſo ſtrongly prejudiced, as were anciently the Greeks in favour of the Egyptians *?

Let us remark nevertheleſs, that even admitting the

[h] Supra, book 1. c. 4. p. 17. &c. [i] See part 1. book 6. c. 2.

[k] See Plato de rep. l. 4. p. 642. de leg. l. 5. p. 852.; Stephan. Byſant. voce Αἴγυπτος, p. 38.; Suidas, voce Αἰγυπτιάζειν, t. 1. p. 643.

[l] See Herod. l. 2. n. 41. [m] See part 1. book 6. c. 2.

[n] See Herod. l. 2. n. 82.; Diod. l. 1. p. 91. & 92.; Cicero de divinat. l. 1. n. 1.; Plut. conviv. ſap. p. 149. A. [o] See part 1. book 6. c. 2.

* See acta philoſoph. t. 1. p. 229. &c. 634. &c.; Conringius de hermet. med. l. 1. c. 12.; Scherlene amœnitat. litter. c. 7. p. 190.

teſtimony

teſtimony of the ancients, the elogies they have been pleaſed to pour upon Egypt, reſpect only her laws, her police, her arts, and her mathematical knowledge; but fall not at all upon thoſe productions which belong properly to genius and taſte. Neither Greece nor Rome have ever praiſed the eloquence, the poetry, the muſic, the architecture, the ſculpture, the painting of the Egyptians. I ſhall ſay as much of what concerns an object much more eſſential, medicine. We ſee, that neither the Romans nor the Greeks ever vaunted of the knowledge of theſe people in navigation, commerce, or the art-military. I ſee nothing then but the philoſophical and moral ideas of the Egyptians, which antiquity ſeems to have held in ſome eſteem; but beyond that, I think I have good grounds for maintaining, that the Egyptians had but very confuſed notions, and very imperfect ideas of all the other objects of human knowledge. I ſhould be greatly tempted to compare this nation with the Chineſe. I think a good deal of reſemblance and conformity is to be perceived between one people and the other *.

CHAP III.

Of the Grecians.

IN that infinite number of different people which anciently inhabited Greece, I ſee only two, the Lacedæmonians and the Athenians, whoſe manners and cuſtoms deſerve a particular attention. The others offer no facts ſufficiently ſtriking, nor any varieties important enough, to engage us to dwell upon them. With very little difference, we may judge of the inclinations and cuſtoms of all the Greeks by the manners, and by the way of living of the Lacedæmonians and Athenians. In the picture which I am about to preſent, I ſhall uſe the ſame method as I have already done in other

* To make an eſtimate of the arts, ſciences, laws, police, and morals of the Chineſe, ſee Anſon's voyage, book 3. c. 10.

articles;

articles; that is, I ſhall ſpeak of them very ſummarily. Longer details would be uſeleſs, and would only multiply repetitions. That matter has been ſufficiently treated of in many works, which are in the hands of all the world.

ARTICLE I.

Of the Lacedæmonians.

THere are very few nations amongſt whom the legiſlature has attended to the regulation of manners and of the ordinary cuſtoms of civil life, by poſitive laws. The Lacedæmonians are to be placed in the ſmall number of people, who have had a code for their manners and their cuſtoms. The ordinances of Lycurgus take in equally the general police of Sparta, and the actions of its inhabitants in private life. We are ſo well inſtructed in the auſterity and rigidity of the diſcipline to which the Spartans were bound up, that I do not think it neceſſary to inſiſt upon it. It is ſufficient to ſay, that the moſt indifferent actions were not free at Sparta, no body had power to regulate his life by his own will, every thing to the ſlighteſt ſteps was ſubjected to one common and uniform rule [p].

A Spartan was not permitted, for example, to marry when he thought proper, to ſee his wife when he choſe, nor to abide with her as long as he would wiſh [q]. Neither was he at liberty to dreſs for himſelf the kind of food he liked, nor to eat in private. Every inhabitant was obliged to take his repaſt in the public halls, and to content himſelf with what was there ſerved up. The tables were each of about fifteen covers. They eat their ſeparate meſſes, ſeated without regard to eaſe [r].

The kings of Sparta themſelves were obliged to this kind

[p] See Xenoph. de republ. Laced. p. 395.; Plut. in Lycurg. p. 54.
[q] Xenoph. p. 393.; Plut. in Lycurg. p. 48.
[r] Athen. l. 4. p. 141.; Serv. ad *Æneid.* l. 7. v. 176.

of life. Agis having returned from gaining a great victory over the Athenians, thought he might ſup at home with his wife. He ſent in conſequence for his commons. The Polemarchs refuſed it him, and he was obliged to go eat at the public table [r].

Neither ſenſuality nor gluttony found there their gratifications. The meats they ſerved were neither choice nor nicely cooked. They conſiſted of bread and wine, cheeſe, dried figs, and ſome morſels of fleſh meat coarſely dreſſed [s]; and even of them they preſented to the gueſts only the quantity abſolutely neceſſary for the neceſſities and for the ſupport of life [t]. To appear too fat and too well fed, was not allowed at Lacedæmon. A Spartan who was found in over good caſe, was ſeverely puniſhed and corrected of it [u]. After having eat and drunk very ſoberly, they returned home in the dark, for it was expreſsly forbid to be lighted home at Sparta [x].

The Spartans maintained the ſame limitations and the ſame coarſeneſs in their dreſs as at their tables. Winter and ſummer they wore the ſame kind of cloathing, which was very ſhort and very ſimply made up [y]. They did not ſhave, but, on the contrary, affected to wear very long and buſhy beards [z]. Their greateſt finery conſiſted in the beauty of their hair. The Spartans wore it very long, and took extremely great care of it [a]. Their manner of dreſſing it was to divide it equally on each ſide of the head [b]. The Spartans were otherwiſe very dirty and ſlovenly about their

[r] Ælian. var. hiſt. l. 3. c. 34.; Plut. in Lycurg. p. 45. 46.

[s] Plut. ibid. p. 46.

The moſt exquiſite of all theſe diſhes was a kind of pottage known in antiquity by the name of *black broth*. We cannot, at this day, define exactly what this ſort of ragout was. But to judge of it by what ancient authors ſay, the black broth of the Spartans muſt have been but a ſorry kind of food. See Cicer. Tuſculan. l. 5. n. 34.; Plut. in Lycurg. p. 146.

[t] Plut. p. 45. 46.

[u] Ælian. var. hiſt. l. 14. c. 7. [x] Plut. p. 46.

[y] Thucyd. l. 1. p. 7.; Plut. t. 2. p. 237.; Xenoph. p. 394. & 397.

[z] Plut. t. 2. p. 232. E. See Meurſ. miſcell. Lac. l. 1. c. 16.

[a] Herod. l. 7. n. 208.; Strabo, l. 6. p. 426.; Plut. in Lycurg. p. 53.; Paul. l. 7. c. 14.

[b] Plut. in Lycurg. p. 53.

perſons,

perſons, being allowed to bathe and perfume themſelves only on certain days preſcribed. However, they were obliged to keep their cloaths unrent and in good condition; for they did not fail to puniſh thoſe who appeared not to take care enough of them [a].

The Spartans were neither more free, nor more nice in their houſes and furniture than in their board and dreſs. We may judge of it by an ordinance which Lycurgus had made on that article. It bore that the ceilings of houſes ſhould be made with an axe, and the doors by a ſaw, without the aid of any other tool [e]. Such houſes as the legiſlator intended, exempted the inhabitants of Sparta from luxury and expenſe. In effect, as Plutarch judiciouſly obſerves, there is no man ſo fooliſh as to carry into houſes ſo coarſely built as thoſe I ſpeak of, either ſtately beds, purple coverlets and tapeſtry, veſſels of gold and ſilver, or, in a word, any kind of magnificence [f].

The pleaſures and amuſements of the Spartans were anſwerable to all this. Their diverſions were the moſt ſerious and of the leaſt variety. The Spartans knew no amuſements but hunting and the different exerciſes of the body; and under this name I comprehend dancing, which was, properly ſpeaking, amongſt theſe people only a kind of military exerciſe [g]. The Spartans had alſo a kind of muſic; but very ſimple, not to ſay very rude [h]. Beſides, all that can properly be called pleaſures and amuſements were baniſhed Sparta [i]. They would not even permit theatrical repreſentations [k], which were the delight of all the other cities of Greece.

The private and particular occupations of the Spartans were, if poſſible, more limited and more reſtrained than were their pleaſures and amuſements. The citizens of

[a] Plut. t. 2. p. 50. 227. 239.; Xenoph. p. 398.; Ælian. var. hiſt. l. 14. c. 7.
[e] Plut. in Lycurg. p. 47. [f] Ibid.
[g] Plut. p. 54.; Xenoph. p. 395.
[h] Plut. p. 54.; Ariſt. de rep. l. 8. c. 5.; Quintilian. inſtit. l. 1. c. 10.; Ælian. l. 12. c. 50.
[i] Plato deleg. l. 1. p. 775. F.
[k] Plut. inſtit. Lac. p. 239.

Sparta could know neither domeſtic œconomy, nor buſineſs, nor law-ſuits, as all their goods were in common; and as beſides they never meddled with commerce, every kind of traffic being expreſsly forbid them [l]. This is not all; they could exerciſe no mechanic art, nor even cultivate their lands. This care was left entirely to ſlaves [m]. As to the ſciences and belles lettres, we know that they never were held in honour amongſt the Spartans. Theſe people learned nothing but what was abſolutely neceſſary to be known for the neceſſities of civil life [n]. We may therefore affirm, that the Spartans, according to the intention of Lycurgus, were extremely idle the greateſt part of their lives. Accordingly, we ſee that they paſſed their time in diſcourſe, and converſing in the common halls, where they aſſembled every day on that account [o]; and even the ſubject of their converſations was limited and regulated by the laws. They could only treat of certain matters [p]. Such was the life of the Lacedæmonians, which gave room for this bon mot ſo famous in antiquity. They boaſted to Alcibiades, the contempt which the Lacedæmonians ſhewed for death. "I do not wonder at it," ſaid he; "it is the "only means they have of freeing themſelves of that per-"petual irkſomeneſs and conſtraint which is cauſed by the "life they are obliged to lead [q]." The Spartans were condemned to that ſad and auſtere life from the inſtant of their birth. For fathers and mothers were not intruſted with the education of their children. They were obliged to place them as ſoon as born in the hands of a certain number of perſons appointed to the care of their bringing up. All the children of Sparta were, in conſequence, fed, clothed, and lodged, in a word, brought up in a uniform manner. Nothing, moreover, could be more hard and rigid than the education they received. They never allow-

[l] See ſupra, book 4. chap. 3. p. 159.
[m] Plut. in Lycurg. p. 54.; Ælian. var. hiſt. l. 13. c. 19.
[n] Plut. in Lycurg. p. 50. [o] Ibid. p. 54. & 55.
[p] See Plut. ibid. p. 46. 51 55.
[q] Ælian. var. hiſt. l. 13. c. 38. See alſo Athen. l. 4. c. 6. p. 138.

ed

ed them more than one very ſlight and very ſlender meal, ſcarce ſufficient to ſupport them. They were forced to go continually without ſhoes and ſtockings, covered in all ſeaſons with a ſimple cloak. For the moſt part, they were even forced to perform their exerciſes entirely naked. They were beſides very ill lodged, and deprived of every kind of amuſement and recreation, which is cuſtomary to allow youth. In ſchool they continually propoſed grave queſtions, which they were obliged to anſwer juſtly and quickly. If not, they might expect to be puniſhed grievouſly, and without mercy. It is thus that children at Sparta were held in perpetual confinement and conſtraint, without being able to find any place where they might be a ſingle moment without ſome body after them to check and to chaſtiſe ſeverely, even the ſlighteſt faults [r].

The pedantic rigour of the Spartan diſcipline had but too much influence on the manners of the inhabitants. It had made them contract a harſh and ſevere character, let us even ſay a fierce and cruel one. I need bring no other proof of it than the behaviour of the Spartans to their ſlaves, ſo well known in antiquity by the name of *Helots* *. They treated them with more hardneſs and barbarity than a civilized nation would treat brute beaſts [s].

Their maſters were expreſsly forbid to give them their liberty, or to ſell them out of the territory of Laconia [t]. The Spartans carried their cruelty ſo far, as to oblige the Helots to receive a certain number of laſhes every year, without having deſerved them, only with a view of keeping them in mind of their obedience. If any one of theſe un-

[r] Xenoph. de rep. Laced. p. 393. 394, 395.; Plut. in Lycurg. p. 46. 50. 51.; Cicero, Tuſcul. l. 2. n. 14.

* The origin of the name *Helots* was probably this. Helos was an ancient city of Laconia, which, under ſome pretence, the Spartans attacked, and, on their becoming maſters of it, they reduced all the inhabitants of it to ſlavery. The Spartans, in proceſs of time, by new conqueſts making new ſlaves, they called them all *Helots*. Thus this particular name became a general denomination for all who were afterwards reduced to ſlavery amongſt the Spartans, ſee Acad. des inſcript. t. 23. m. p. 281.

[s] See Plut. in Lycurg. p. 57.; Athen. l. 6. p. 272. A. l. 14. p. 657.

[t] Acad. des inſcript. t. 23. m. p. 275.

happy

happy ſlaves ſeemed, by his advantageous mien, or the beauty of his ſhape, to riſe above the condition he was born in; they put him to death; and his maſter was fined, in order that he might take care, that, by his ill treatment of the reſt of his ſlaves, none of them might thereafter offend the eyes of the Spartans by their exterior qualities. A cap and a coat of dogs ſkin was all the cloathing of the Helots. They could puniſh them for the ſmalleſt fault; and however inhumane was the treatment they met with, theſe unhappy ſlaves had no power to reclaim the authority of the laws. Such was the exceſs of their miſery, that they were at the ſame time the ſlaves of the public and of private people. They were lent in common. In fine, for the height of contumely and abaſement, the Helots were often forced to drink to intoxication, and in that condition were expoſed to the eyes of the young people, in order to inſpire them with horror for a vice which ſo much degrades human nature.

The Spartans even often joined perfidy to cruelty to deſtroy theſe unhappy victims, when their number increaſing too much gave cauſe to fear their undertaking ſome enterpriſe. Hiſtory informs us, for example, that, on a certain occaſion, the Lacedæmonians, anxious about the number of Helots which were diſperſed throughout the the ſtate, and ſeeking to get rid of them without riſk, pretended to give freedom to many of them, in order, as they ſaid, to incorporate them afterwards in the troops. Under this pretext, they gave out, that the moſt robuſt and moſt valiant of the Helots had only to preſent themſelves to be inrolled. On this news, a multitude aſſembled full of courage and of good-will. Amongſt thoſe who offered themſelves, they picked out two thouſand whom they regarded as the moſt capable of any great enterpriſe. They crowned them on the ſpot with flowers, and led them in great pomp into the temples of Sparta; but ſoon after theſe

two

two thouſand Helots diſappeared, without its ever being known what became of them [w].

On another occaſion, ſome Helots condemned to death for we know not what crime, took refuge at Tænaros, a promontory of Laconia, where Neptune had a temple greatly revered. The ephori were not afraid to drag them thence, and lead them to execution. That action has appeared ſhocking even to profane authors. They all looked upon the earthquake which then happened, the moſt horrible that had been heard of, as the effect of the reſentment of Neptune againſt the Spartans, who had dared to violate the aſylum of Tænaros [x].

What ſhall we ſay, in fine, of that abominable inſtitution, deſigned in ancient authors under the name of the *ambuſcade?* Here is their account of it. From time to time, thoſe who were appointed to govern the youth of Sparta, choſe out amongſt their pupils ſome of thoſe who appeared the boldeſt and moſt prudent. They armed them with poniards, and gave them neceſſary victuals for a certain number of days. In this plight, they ſent theſe young people to beat the fields each on his own ſide. Theſe ſcouts thus diſperſed, had orders to hide themſelves in the day-time, in covered places or caverns. As ſoon as night came, they quitted their ambuſcades, and took the high roads, where they ſlaughtered all the Helots they met; a cruelty by ſo much the more eaſy to commit, as the wretches they attacked were not allowed to carry arms. Sometimes even theſe aſſaſſins marched in plain day-light, and killed ſuch of the Helots as appeared the ſtrongeſt and moſt robuſt [y].

The cruelty and treachery which the Lacedæmonians uſed towards their ſlaves, was alſo very familiar to them towards all whom they thought it their intereſt to oppreſs. I have cited a very ſtriking example of it in the preceding

[w] Thucydid. l. 4. n. 80. p. 285.; Diod. l. 12. p. 525.; Plut. in Lycurg. p. 56.

[x] Acad. des inſcript. *loco cit.* p. 275.

[y] Plut. in Lycurg. p. 36. See alſo Athen. l. 14. p. 657.

book.

book [a]. But it may not be improper to produce ſome others.

Alcibiades, whoſe courage and capacity were known to the Lacedæmonians, had been obliged to go ſeek an aſylum with the younger Cyrus, brother of Artaxerxes, King of Perſia. He was not long there without penetrating the ſecret deſigns of this prince, and diſcovering the object of the preparations he ſaw him make. Taken up with the means of raiſing his oppreſſed country, Alcibiades thought he ſhould infallibly ſucceed, if he could inform Artaxerxes of the projects which Cyrus plotted againſt him. In effect, a diſcovery of that importance could not have failed to conciliate the favour of the monarch, and he would have undoubtedly obtained the ſuccours he had need of for the re-eſtabliſhment of the affairs of Athens. Full of theſe ideas, Alcibiades took the road to Perſia. But the Lacedæmonians advertiſed of the motives of his journey, and convinced that their affairs were ruined without reſource if they did not find means of getting rid of Alcibiades, they employed for that end the blackeſt of all villanies. This great man was then in the government of Pharnabazus. The Lacedæmonians wrote to that ſatrap, to engage him to deliver to them, at any price whatſoever, an enemy ſo formidable. Pharnabazus gained over by their offers, and their promiſes, ſerved them to their wiſh, and cauſed Alcibiades to be aſſaſſinated [a].

The manner in which the Lacedæmonians uſed the advantages they had obtained over the Athenians in the Peloponneſian war, were alone ſufficient to cover them for ever with infamy and diſgrace. In that city, ſo dear to all Greece, they exerciſed the moſt horrible cruelty. They put to death, ſays Xenophon, more perſons in eight months of peace than the enemies had killed in thirty years of war [b]. All that then remained at Athens of perſons of a-

[a] Chap. 2. p. 177. See alſo Ælian. var. hiſt. l. 6. chap. 7.

[a] Cornel. Nepos, in Alcibiad. n. 9. &c.; Diod. l. 14. p. 647.; Plut. in Alcibiad. p. 213.; Juſtin. l. 5. c. 8.

[b] Xenoph. de reb. geſt. Græc. l. 2. p. 278.

ny diſtinction, left it to ſeek ſome where an aſylum where they might live in ſafety. The Lacedæmonians had the inhumanity to endeavour to deprive theſe unhappy fugitives of that laſt reſort. They forbade by a public edict the cities of Greece to give them ſhelter, commanded that they ſhould deliver them to the thirty tyrants who then ravaged Athens, and condemned to a fine whoſoever ſhould oppoſe the execution of this cruel edict [c].

The conduct which the Lacedæmonians, nearly about the ſame time, obſerved with regard to Syracuſe, proves ſtill better with what ſpirit that people was animated, and what were the fundamentals of their policy. The Syracuſans were then diſputing their liberty againſt Dionyſius the tyrant, and had juſt received a conſidera ble check. In theſe circumſtances, the Lacedæmonians deputed one of their citizens to Syracuſe, in appearance to teſtify the part they took in the misfortune of that town, and to offer ſuccours; but in reality to ſtrengthen Dionyſius in the reſolution of maintaining himſelf, and bringing his enterpriſe to an iſſue, hoping that this prince once become powerful would be of great uſe to them for the future [d]. In fine, Herodotus ſays plainly, ſpeaking of the Lacedæmonians, that thoſe who knew the genius of that people, knew well that their actions commonly contradicted their words, and that they could in no manner be truſted [e]. What ideas muſt ſuch traits as theſe give us of the character of the Lacedæmonians?

I paſs over in ſilence a reproach that might be made them on ſtill better grounds for their barbarity to their children. Every year a feaſt was celebrated in honour of Diana, and then all the children of Sparta were whipped till the blood ran down upon the altars of that inhuman goddeſs. What brutality! thus to lacerate the bodies of theſe innocent victims, under pretence of accuſtoming them to ſupport pain without impatience? They carried it to ſuch

[c] Diod. l. 14. p. 641. &c.; Juſtin. l. 5. c. 9.; Plut. in Lyſandr. p. 448.
[d] Diod. l. 14. p. 646. [e] L. 9. n. 53.

exceſs, that ſome were often ſeen to expire in that cruel ceremony. It was performed in preſence of all the city, under the eye of fathers and mothers, who beholding their children all covered with blood-ſores, and ready to give up the ghoſt, exhorted them to endure the number of laſhes that were to be inflicted [f], without ſending forth a cry, or giving the leaſt ſign of pain. What name ſhall we give to this pretended fortitude?

What, moreover, ſhall we think of that obſtinate and exaſperated animoſity with which the youth of Sparta fought with each other on certain days of the year? They divided themſelves into two bands, which repaired by different roads to a certain place before agreed upon. The ſignal given, theſe young people fell upon each other tooth and nail, hand and foot, kicking, cuffing, and biting with all their force, and even tearing out each other's eyes. "You ſee them," ſays Pauſanias, "fight it deſperately, "ſometimes one againſt one, ſometimes by little bands, "ſometimes, in fine, all together, each troop making the "utmoſt efforts to drive back the other, and overthrow it in "the water which ſurrounded the field of battle [g]."

Again, what ſhall we ſay of that more than inhuman courage, with which, at Sparta, a mother received the news of the death of her children ſlain in battle? That loſs not only extorted no fear, but it even cauſed a certain joy and ſatisfaction, which ſhe haſtened to ſhew in public [h]. Theſe ſame women, however, teſtified the greateſt dejection and moſt abject puſillanimity, when they ſaw Epaminondas, after winning the battle of Leuctra, march ſtraight to Sparta. They ran up and down all in deſpair, filling the air with lamentable cries, and cauſed more diſorder and confuſion than the enemies themſelves [i]. What was then become of that ferocious courage, and that barbarous oſtentation, with which the Spartan women delighted to

[f] Cicero, Tuſcul. l. 2. n. 14.; Nicol. Damaſcen. in excerpt. Valeſ. p. 522.; Plut. in Lycurg. p. 51.; Pauſ. l. 3. c. 16.
[g] L. 3. c. 14. [h] Plut. in Ageſil. p. 612.; Ælian. var. hiſt. l. 12. c. 19.
[i] Xenoph. de reb. geſt. Gr. l. 6. p. 370.; Plut. in Ageſil. p. 613. C.

inſult

inſult nature on ſuch ill-timed occaſions as thoſe which informed them of the loſs of their children?

I cannot alſo omit taking notice of that examination which they made, at Sparta, into the conſtitutions of new-born children. As ſoon as a boy was born, he was carried into a certain place where he was viſited by the elders of each tribe. If he appeared to them to be delicate, weak, in a word, of a conſtitution which did not promiſe, in appearance, firm and vigorous health, they condemned him to periſh without pity, and he was thrown directly into a quagmire ſituated at the foot of the mountain Taygeta [k].

What has been ſaid is, I think, ſufficient to prove that on all occaſions the Spartans ſeem to have been bent to ſtifle the voice of nature and the cries of humanity, often even in contradiction to all reaſon and prudence. In effect, we are taught by experience, that many children whom it was thought impoſſible to rear for ſome days after their birth, have enjoyed, as they grew up, the firmeſt and moſt robuſt ſtate of health. Without going from Sparta, we have a convincing proof of this in the perſon of Ageſilaus. This prince, who was born lame, and came into the world with a complexion ſo feeble and ſo delicate in appearance, that they had no hopes of being able to rear him; Ageſilaus notwithſtanding lived fourſcore and four years; and in the courſe of that career, what ſervices did he not render his country [l]?

The auſterity, and, if I dare call it ſo, the pedantry of the laws of Lycurgus, might make us believe that chaſtity was one of the principal virtues which he had taken care to inculcate into his people; but in this reſpect we ſhould be greatly miſtaken. How aſtoniſhing is it to ſee, that this famous legiſlator had not ſo much as thought of making public decency and decorum reſpectable? To what a degree muſt not the uſe of public baths, common to men and women, have been deſtructive of all modeſty, baſhfulneſs,

[k] Plut, *loco cit.* p. 49. [l] See Plut. in Ageſil.

and decency of behaviour [m]? and then thoſe plays where young perſons of both ſexes fought naked againſt each other, and danced promiſcuouſly in the ſame condition [n]? What conſequences had not all this on the manners of the Spartan women? They were vitious and diſſolute to ſuch a height, that the ancients have reproached the Spartans as ſhamefully diſtinguiſhed by their debauchery from all the other people of Greece [o]; debauchery, moreover, authoriſed by the very laws of Lycurgus. This legiſlator ſeems to have ſtudied to find means of aboliſhing all the ideas which ſhould be entertained of conjugal fidelity.

An old man, for example, who had a young and handſome wife, might, without offending decency or the laws, offer her to a well-made and robuſt young man. And this old man was allowed to own and bring up as his own, the child that ſprung from that adultery. This was not all. A luſty, well-ſhaped young fellow that ſaw another have a handſome and agreeable wife, might demand the huſband's permiſſion to have dealings with her, under the pretext of giving the ſtate children, who ſhould be well made and of good conſtitution; and a huſband was not at liberty to reject ſuch a demand [p]. In a word, the Lacedæmonians mutually lent their wives with the utmoſt eaſe, and without the ſmalleſt delicacy [q]. Their hiſtory furniſhes an event on this ſubject which I think ſingular in its kind.

In the war which the Lacedæmonians declared againſt the Meſſenians, they bound themſelves by the moſt terrible oaths, not to return to Sparta till they were revenged for the injury they had received. That war drew into length, and the Spartans had already been ten years before

[m] Acad. des inſcript. t. 1. h. p. 102. [n] Plut. p. 47. & 48.

[o] Ariſt. de rep. l. 2. c. 9. p. 328. Euripides gives the Spartan women the epithet of Ἀνδρομανεῖς, *viros cupidiſſime appetentes*, Androm. v. 595. Theodoret reproaches them with having "been ſubject to ſatisfy their conſtitution "with whomſoever they thought good." De curand. Græc. affection. ſect. 10. p. 630.

[p] Xenoph. de rep. Lac. p. 393.; Plut. in Lycurg. p. 49.; in Numa, p. 76.

[q] Nicol. Damaſcen. in excerpt. Valeſ. p. 522.

Meſſene,

Meſſene, without being any thing farther forward. They began then to apprehend that a longer abſence would inſenſibly unpeople their city. To obviate this inconvenience, they took the ſtrange revolution of ſending back to Sparta, all thoſe who had joined the army ſince their taking the above-mentioned oath, and to abandon to them the wives of the other Spartans who were bound to remain before Meſſene *. Thoſe who ſprung from that illegitimate commerce, were called *Parthenians*; a name expreſſive of the origin and cauſe of their birth [r].

The known indecency of dreſs of the Spartan women, was a natural conſequence of the bad education they received, and of the little care that was taken to inſpire them with thoſe ſentiments of modeſty and reſerve ſo becoming in the ſex. Their robes were made in ſuch a manner that they could not move a ſtep without diſcovering their legs, and even their thighs [s]; an immodeſty exclaimed againſt by all writers of antiquity [t]. Ariſtotle wiſely obſerves, that the little regard they had at Sparta for bathfulneſs and decorum, was the ſource of all the diſorders that reigned in that city [u]. In the Andromache of Euripides, Peleus reproaches Menelaus with being the cauſe of the diſſolute conduct of Helen by the bad education he had given her [x].

Theſe women however, ſuch as they were, governed the

* Juſtin. l. 3. c. 4. ſays very plainly, that it was on the complaint of their wives who by no means agreed with ſo long a widowhood, that the Spartans took the reſolution I ſpeak of. See alſo Strabo, l. 6. p. 427. & 428.

[r] Juſtin. l. 3. c. 4; Diod. l. 15. p. 54.; Strabo, l. 6. p. 427. & 428.; Servius ad Æneid. l. 3. v. 551.

[s] Virg. Æneid. l. 1. v. 315. 320.; Plut. p. 76. & 77.

[t] See Plut. in Numa, p. 76. & 78; Clem. Alex. pædag. l. 2. p. 238.; Pollux. l. 7. c. 13. ſegm. 55.

[u] De rep. l. 1. c. 9. p. 328.

[x] Act. 3. ſcen. 2. verſ. 595. &c. We might conclude from this fact, that the diſorder of the women at Sparta was as old as the moſt ancient ages of Greece; and I am much inclined to believe it. Perhaps alſo Euripides makes Peleus ſpeak on that occaſion only relatively to the indecency which reigned in the manners of the Spartans when that tragedy was compoſed. However that may be, Lycurgus is extremely blameable for not having remedied that diſorder, and for having, on the contrary, authoriſed it by his laws.

minds

minds of their huſbands with the moſt abſolute dominion. They not only ruled in their own houſes, but alſo the whole ſtate. The Spartans communicated to their wives the cloſeſt and moſt important ſecrets of the ſtate. They even did it with leſs reſerve than thoſe would converſe with their huſbands on their private and domeſtic affairs [y]. Accordingly Ariſtotle aſſerts, that it was never poſſible to reform and regulate the manners of the Spartan women, becauſe of the too great aſcendant they had acquired over their huſbands [z]: An aſcendant the more aſtoniſhing, as the Spartans, like all the Greeks, appear to have been ſingularly addicted to that abominable paſſion, as unnatural as oppoſite to the mere light of nature [a]. Yet the ſex at Sparta was in general very beautiful [b].

Let us ſum up, from all we have ſaid, the general and ruling character of the Lacedæmonians. Theſe were, without contradiction, the braveſt, the moſt warlike, the beſt ſkilled in the art-military, the moſt politic, the firmeſt in their maxims, and moſt conſtant in their deſigns, of all the people of Greece: but at the ſame time they were an imperious and auſtere people, deceitful, intractable, haughty, cruel, and perfidious, capable, in a word, of ſacrificing every thing to ambition and to intereſt, and holding in contempt the fine arts and the ſciences. Accordingly Lycurgus appears to have been ſolely occupied with the care of ſtrengthening their bodies, and to have entirely neglected the forming of their hearts, and cultivation of their minds. Let us not therefore wonder that the character of the Lacedæmonians, naturally rugged and auſtere, often degenerated into ferocity; a vice which ſprung from their education, and which alienated the good-will of all their allies. A people who paſſed their whole lives in correcting or being corrected by others [c], in giving grave

[y] Ariſt. de rep. l. 2. c. 9.; Plut. in Lycurg. p. 47. 58.; in Numa, p. 77.; in Agid. & Cleom. p. 798.

[z] See Plut in Lycurg. p. 50. & 51.; Xenoph. de rep. Laced. p. 395.

[a] Id. ibid. [b] Athen. l. 13. p. 566.

[c] See Xenoph. de rep. Laced. p. 394. 395. & 396.; Plut. in Lycurg. p. 46. 50. 51. 55.; Meurſ. miſcellan. Lac. l. 2. c. 3.

precepts,

precepts, or receiving them from rigid cenſors, who always mingled auſterity with their leſſons; ſuch a people, I ſay, could never contract a mild and humane behaviour, or render their private converſation agreeable. In a word, the Spartans ſeem to have been obſtinately blind to the moſt valuable endowments of human nature [a]. Such were the manners, ſuch the genius of a people admired by all antiquity, and propoſed by profane authors as a model of wiſdom and virtue.

Sparta, moreover, offers a very ſtriking example of the facility with which men run always into extremes. When, by the victories of Lyſander, the uſe of gold and ſilver was introduced into that republic, and had baniſhed the ancient auſterity of manners, then did theſe famous Spartans directly abandon themſelves to all the exceſſes of luxury and debauchery. The ſofteſt and moſt magnificent beds, the eaſieſt and moſt delicate cuſhions, the moſt exquiſite wines and perfumes, the niceſt meats, the richeſt and higheſt wrought plate, the rareſt and moſt ſuperb tapeſtry, none of theſe were too good for the Spartans [b]. Nothing beſides could appeaſe their inſatiable cupidity. It was then a proverb in Greece, that gold and ſilver were indeed ſeen to enter Sparta, but no one ever ſaw theſe metals return

ARTICLE II.

Of the Athenians.

THE manners of the Athenians offer the moſt ſtriking and direct contraſt with thoſe of the Lacedæmonians. It were even difficult to find a wider difference between any two cities, however diſtant, than was in the character and common cuſtoms of civil life amongſt the Athenians and the Lacedæmonians. Theſe two cities were nevertheleſs

[a] See Ariſt. de rep. l. 8. c. 4.
[b] See Athen. l. 4 p. 141. & 142.; Plut. in Agid. & Cleom. p 795.

near

near enough neighbours, and made equally a part of one and the ſame nation. But by ſo much as mens actions and even their thoughts, if we may ſay ſo, were conſtrained and limited at Sparta, by ſo much were they free and independent at Athens. In a word, theſe two republics were actuated by views altogether oppoſite, and by principles entirely different. The reader will ſoon ſee a very plain proof of this, in the few details which I ſhall give of the manners and cuſtoms of the Athenians.

An Athenian was free to feed, clothe, and lodge himſelf as he would. He was alſo at liberty to give himſelf to any art or ſcience that he thought proper. In fine, the choice of his occupations was not regulated or reſtrained by any law. He might paſs his time in the manner that appeared to him the moſt convenient, provided it was not in abſolute idleneſs. In this reſpect Athens and Lacedæmon thought very differently of the private life and daily employments of their citizens. We have ſeen, that Lycurgus had forbid the Spartans to apply to any mechanic art, to buſy themſelves with any domeſtic œconomy, and even to cultivate the ſciences. By this means he had impoſed the hard neceſſity of paſſing the greateſt part of their lives in idleneſs and want of work. Solon, more enlightened than Lycurgus, had, on the contrary, been ſenſible, that ſloth and too much leiſure are more to be feared than all the vices that can reign in a ſtate. It was to prevent the introduction of thoſe that he appointed the Areopagus to watch the private conduct of the inhabitants of Athens, and to take cogniſance of the means which individuals employed for their ſubſiſtence. This legiſlator had even ordained puniſhments for thoſe who ſhould paſs their lives in entire idleneſs[f].

The effect of a police ſo wiſe and ſo attentive, was the flouriſhing at Athens of the fine arts, of manufactures, of commerce, of navigation, ſciences, eloquence, in ſhort, of all the knowledge which can advantageouſly diſtinguiſh a na-

[f] Plut. in Lycurg. p. 54; in Solon. p. 90. E.; in Apophthegm. Lac. p. 241. C.

tion.

tion. But at the ſame time, the great riches introduced into Athens by arts and commerce, produced the ſame effects that they have always produced amongſt all nations. I would ſay an exceſſive inclination for pageantry, luxury, and magnificence, joined to an extreme love of pleaſure and ſenſuality. Athens, after Solon's time, very ſoon became a voluptuous city, and its inhabitants yielded but too readily to the allurements of ſenſual pleaſure.

The tables of rich and opulent perſons were ſerved with exquiſite luxury. The extenſive commerce of the Athenians enabled them, as Xenophon remarks, to live voluptuouſly, and to procure all the delicacies which foreign countries could then ſupply [g]. We muſt however do juſtice to this people. It appears, that, in general, the Athenians were rather dainty and delicate, than addicted to gluttony and drunkenneſs. I do not find in antiquity, that they were ever taxed with committing exceſſes in eating and drinking; we can even aſſert, that the common people were ſober and frugal [h]. Let us ſay further, that among the Athenians the greateſt feſtal pleaſure conſiſted in a flow of learned, ſprightly, and polite converſation, as agreeable, in a word, as uſeful and intereſting. The banquet of Plato and that of Xenophon give us a model of the ordinary table-talk of the Athenians, and it is thus that they prevented the two extremes of licentious mirth and irkſome wearineſs, which preſide but too often at moſt long meals.

To the charms of converſation, the Athenians added, in their repaſts, that of liſtening to the recital of ſome poetical performance, or of hearing ſome ſkilful muſician ſing, accompanied with his lyre; often even they introduced male and female dancers into their banquetting-room. Muſic and dancing, among theſe people, made one of the principal and moſt uſual entertainments at their feaſts. For the reſt, we know, that the women did not eat with the

[g] De rep. Athen p. 405.

[h] See Potter Archeolog. l. 4. c. 18. p. 743.; Caſaubon. in not. ad Athen. l. 2. c. 8.

men [i], and that ſupper was the favourite meal of the Athenians [k]. Let us add, that they eat crowned with flowers, and lying upon beds [l].

The Athenians were very magnificent and curious in their dreſs. They wore long robes of linen extremely fine, dyed purple or other precious colours [m]. Beneath theſe robes they had tunics of various forms and kinds [n]. Their fingers were loaded with jewels and rings of great price. They wore magnificent girdles, rich and elegant buſkins [o]. Their hair was very artfully arranged, curled, and laid back round the forehead by hooks of gold, made in the form of graſſhoppers [p]. For the reſt, it does not appear, that the Athenians were in uſe to cover their heads, or that they wore any thing that could ſerve for that purpoſe [q]. This luxury and magnificence of dreſs extended even to the ſlaves. Xenophon tells us, that a citizen of Athens could ſcarce be at all diſtinguiſhed from a ſlave by the richneſs of his cloathing, or by any other external mark [r].

We have ſeen, in the ſecond part of this work, that anciently the Greeks went always armed. The Athenians were the firſt who renounced that barbarous and ferocious cuſtom. From the time that they believed public ſafety and tranquillity well eſtabliſhed in their ſtate, they ceaſed to go continually girded with a ſword, and no longer wore it, except when going to war [s].

The ladies of Athens were very careful of their dreſs, and commonly employed the whole morning in it. Their toilette conſiſted of numerous articles. They made uſe of paint, and of all ſuch drugs as they imagined proper to cleanſe and beautify the ſkin. They took alſo great care of their teeth, blackened their eye-brows, and applied red to

[i] See Lucian, Plutarch, &c. [k] Plat. Xen. Plut. &c.
[l] Potter Archeolog. l. 4. c. 20.
[m] Thucydid. l. 1. p. 6. n. 6.; Clem. Alex. Pedag. l. 2. p. 233.; Athen. l. 12. p. 512.
[n] Athen. *loco cit.*; Plato in Hippia, p. 255. [o] Plato, ibid.
[p] Thucydid. Clem. Alex. Athen. *loco cit.*
[q] See Lucian in Anacharſi, n. 16.
[r] De rep. Athen. l. 493. [s] Thucydid. l. 1. p. 6. n. 6.

their

their lips. The art of compoſing head-dreſſes, was their principal occupation. They employed the moſt precious eſſences in perfuming their hair, which they commonly dyed black or ſome other colour, and then arranged in various curls by means of hot irons. A part of it was laid back and diſpoſed upon the forehead, the reſt was ſuffered to flow looſe, and play negligently upon the ſhoulders. The dreſs of the legs and feet of the Athenian ladies was alſo extremely neat and elegant. As to their cloaths, they were compoſed of extremely light and fine ſtuffs. They took care to have their robes always cloſe upon the boſom, and that they ſhould advantageouſly ſhew the ſhape [t].

We do not find with all this, that the women of Athens were ever reproached in antiquity with the ſame indecency of dreſs, the ſame depravation of manners, or the ſame ambition as the women of Sparta. As to this laſt article, eſpecially, it does not appear, that the Athenian women had any influence in the government of the ſtate. They lived, in general, very retired in their apartments, ſcarce ever appearing in public, and without having any free communication with men, a cuſtom which had place amongſt moſt of the people of Greece.

I have ſhewn elſewhere, that, amongſt the Athenians, the external architecture of their houſes could not have any great appearance or ſplendor [u]. But in the inſide, they were highly finiſhed and very voluptuous. The rich ſpared nothing to procure themſelves, in that reſpect, all the conveniencies and all the ornaments poſſible. They had large gardens within their walls, diſpoſed in the moſt commodious manner for the different bodily exerciſes, ſuch as wreſtling, running, &c. in which the Athenians greatly employed themſelves. They had alſo bathing-rooms, with all that belonged to them neceſſary for refining upon that pleaſure [x]. The taſte which the Athenians had for painting, ſculpture, and, in general, for all the arts of luxury and delight, does not permit us to doubt, that their apartments were furniſhed

[t] Lucian. Amor. n. 39. & 40.

[u] Supra, book 2. c. 3. p. 87.

[x] Xenoph. de rep. Athen. p. 405.

with pictures, ſtatues, and rich veſſels. We know alſo, that part of the luxury and ſumptuouſneſs of theſe people conſiſted in the beauty and richneſs of the beds and of the carpets which they ſpread upon their floors and their ſeats.

Although the marine was the principal occupation of the inhabitants of Athens, and men of all ranks took upon them to handle the oar [r], yet was this people by no means affected with that roughneſs which ſeamen are generally accuſed of. On the contrary, nothing is more celebrated in antiquity, than the politeneſs of the Athenians: A politeneſs which reached even to the dregs of the people. The Atticiſm diſtinguiſhed the inhabitants of Athens, as much as the urbanity did afterwards diſtinguiſh the inhabitants of Rome. I own, however, that it is difficult to find that politeneſs and that delicacy of taſte ſo boaſted of, in thoſe obſcenities which were continually heard in the theatre of Athens. The comedies of Ariſtophanes are full of groſs images, which amongſt us the moſt impudent and diſſolute man would be aſhamed of. I ſhall ſay the ſame of thoſe bitter railleries, of thoſe groſs and indecent ſallies which were uttered in the public aſſemblies. Nothing is more diſtant from the idea which we muſt naturally form of politeneſs, than the manner in which Æſchines and Demoſthenes treat each other in their harangues. They inte change the moſt atrocious abuſe. I ſhould think, moreover, that theſe faults may be attributed to the form of government of Athens.

In republics men eaſily agree to look upon unbounded headlong liberty as the moſt precious attribute of humanity. They uſually make perfect equality conſiſt in unlimited freedom of ſpeech. This ſentiment always imprints on republican ſpirits a certain aſperity which muſt neceſſarily affect the manners.

I have already told the reader, that there were few towns in Greece where the taſte for pleaſure was more lively than at Athens. They were paſſionately fond of feaſting, hunting, muſic, dancing, and particularly of theatrical repreſen-

[r] Xenoph. de rep. Athen. p. 404.

tations.

tations. The Athenians had alſo other ſorts of public ſpectacles. Theſe were the parades and religious proceſſions which on certain days of the year were made with great ceremony, pomp, and magnificence. The gay youth of Athens had alſo their particular taſtes, as is uſual in all rich and opulent cities; they were fond of ſplendid frolics, of uncommon kinds of dogs, of having fine horſes and many of them; of keeping courteſans and female dancers [z]. The children of Piſiſtratus were accuſed of introducing into Athens a taſte for debauchery and libertiniſm [a]. The courteſans however were in great favour in the time of Solon [b]. It was, to ſpeak of it by the by, the only idea the Athenians had of gallantry. For never did the Greeks know real love, nor any thing belonging to it. Their hearts and minds were abſolutely abandoned to that deteſtable paſſion ſo totally oppoſite to the taſte for women [c], with whom, beſides, the men lived not in domeſtic ſociety.

We muſt allow, however, that notwithſtanding the diſorders of the youth, inevitable in great cities, decency of manners and public decorum were very much reſpected at Athens. A citizen who had been ſeen to enter a tavern to eat and drink, was diſhonoured for ever. No more was neceſſary to cauſe a ſenator to be baniſhed from the Areopagus [d]. An archon convicted of being drunk, was for the firſt time condemned to a heavy fine, and in caſe of relapſe, was puniſhed with death [e]. Hiſtory has even handed down two remarkable examples of the reſpect which the Athenians had for public decency and modeſty. In the war which Philip King of Macedon carried on againſt them, one of his couriers was ſeized. They read all the letters he carried, except thoſe which Queen Olympia the wife of Philip had

[z] See Plut. in Alcibiad.; Athen. l. 12. p. 532.

[a] Athen. ibid. Piſiſtratus was cotemporary with Solon.

[b] Athen l. 13. p. 569.

[c] See Herodot. l. 1. n. 135.; Plut. in Solon. p. 79. in Themiſt. et Alcibiad. *paſſim.*; Cicero Tuſcul. Quæſt. l. 4. n. 33.; Lucian *paſſim.*; Athen. l. 13. p. 564. & 601.; Menag. in not. ad Diog. Laert. l. 1. n. 55. p. 32.

[d] Athen. l. 13. p. 566.

[e] Diog. Laert. in Solon. l. 1. n. 57.; Pollux, l. 8. c. 9 ſegm. 89.

wrote

wrote him. Thoſe the Athenians ſent back to that prince with the ſeals unbroken, being ſtopped from opening them by the conſideration of the reſpect which is due to the ſecrets which may be between huſband and wife [f]. The ſame Athenians having ordered, that ſtrict ſearch ſhould be made after the preſents which Harpalus, by order of Philip, had diſtributed to the orators of the city, they did not permit the houſe of Callicles, who was then newly married, to be ſearched, and that out of reſpect for his ſpouſe, who was then lodged there [g].

I forgot to put in the number of the common pleaſures of the Athenians, that of their walks, the chief delight of which always conſiſted in the charms of converſation. I ſhall moreover remark, that what we call play in our days, was ſcarce known at all to the ancients; and that is a very notable difference between their manners and ours. Their walks, and their various bodily exerciſes, ſerved them in place of it. Beſides, as I have ſaid, they did not live with the ladies.

As to the particular occupations of the Athenians, they cannot have failed of them. Commerce alone to which they were greatly addicted, ſufficed to fill up a great part of their time. A good deal too was employed in ſoliciting and conducting their affairs; for theſe people were fond of chicane and law-ſuits [h]. They were obliged, beſides, to carry on intrigues to pay their court, and to inſtruct themſelves in the private and public intereſts of the ſtate, ſince every citizen of Athens had a ſhare in the government of the republic. For this reaſon it is, that eloquence was ſo highly honoured amongſt this people. It was eloquence that led the way to the higheſt offices, that ruled in the aſſemblies, in a word, that decided every thing, and gave an almoſt ſovereign power to thoſe who poſſeſſed the talent of fine ſpeaking. To the ſtudy of rhetoric, the Athenians uſually joined that of philoſophy, and under that denomination we ought to com-

[f] Plut. in Demoſth. p. 898. [g] Id. ibid. p. 857.
[h] See the waſps of Ariſtophanes, and Caſaubon. in Athen. l. 14. c. 10. p. 910.

priſe

priſe all the ſciences which compoſe or have any relation to it.

Furthermore, though the education and way of living at Athens was ſo different from thoſe of Sparta, the Athenians were not eſſentially leſs brave or leſs warlike than the Spartans. The battles of Marathon, of Salamin, and of Platea, without mentioning a number of other very memorable actions, are teſtimonies of the bravery and magnanimity of the Athenians ſufficiently authentic to make it needleſs to inſiſt upon it. They are perhaps the only nation in the univerſe who, according to the remark of Athenæus, clothed in purple, and decked in all the ornaments of dreſs, have beaten and diſperſed formidable armies [i]. Glory had the ſame effect on the minds of the Athenians, that diſcipline produced in thoſe of the Spartans. For never people had more of a ſenſe of honour, or were more greedy of glory and of praiſe, than were the Athenians.

If there was the greateſt oppoſition between the manners of the Athenians and thoſe of the Lacedæmonians, there was, if the expreſſion may be allowed, ſtill more between the eſſence of their genius and of their character. Cruelty was the ruling propenſity of the Spartans, mildneſs was in general the ground of the character of the Athenians. The difference between them, in this reſpect, is eaſily ſeen in the manner of treating the ſlaves amongſt each of the two people. I have already ſhewn to what exceſs of outrage the Spartans were carried againſt their ſlaves. The Athenians, on the contrary, treated them with great humanity. Their condition was infinitely more gentle at Athens than in any other city of Greece [k]. They had an action againſt their maſters on account of outrage and ill uſage [l]. If the fact was proved, the maſter was obliged to ſell his ſlave, who, while the proceſs depended, might retire into an aſylum deſtined to ſecure him from all violence [m]. The liberty of which the Athenians were ſo jea-

[i] Athen. l. 12. p. 512.
[k] Demoſth. Philipp. 3. p. 383. [l] Athen. l. 6. p. 266. & 267.
[m] Plut. de ſuperſtit. p. 166. in Theſ. p. 17.; Pollux. l. 7. c. 2. ſegm. 13.

lous,

lous, was not interdicted to the ſlaves. They could purchaſe their freedom in ſpite of their maſters, when once they had amaſſed the ſum which the law had fixed for that purpoſe [n]. It was not even unuſual for a patron who was content with the ſervices of his ſlave, to give him his liberty for reward.

The humanity of the Athenians extended even to beaſts. Plutarch relates, on this ſubject, a ſingular fact which is a ſtrong inſtance of the general good nature of this people. When the conſtruction of the temple named *Hecatonpedon* was finiſhed, the Athenians ordained, that all the beaſts of burthen ſhould be ſet at liberty that had been employed in that work, and that they ſhould be ſuffered to feed at pleaſure in the beſt paſtures for the reſt of their life. A mule who conformably to that ordinance had been left at full liberty, coming of its own accord to preſent itſelf to work, and heading thoſe who drew the carriages for the citadel, the people charmed with that action, made a decree that the mule ſhould be particularly taken care of, and fed at the expenſe of the public [o].

Theſe ſketches, as I ſaid juſt now, do honour to the character of the Athenians, and prove, that a great fund of mildneſs and good nature reigned in the minds of this people. But we might cite others which equally ſhew, that, on many occaſions, the Athenians forgot theſe principles of humanity, and gave themſelves up to the moſt cruel exceſſes that rage and giddy fury could inſpire. What ſhall we think, for inſtance, of the barbarity with which they put to death the heralds ſent by Darius to ſummon them to ſubmit to his dominion [p]? On that occaſion, they violated equally the rights of nations and thoſe of humanity. What name alſo ſhall we give to the fury with which the Athenians condemned to death ten of their generals, who could be reproached with no other crime than having neglected, after a victory at ſea, to ſtop to pick up the floating bodies

[n] Plaut in Caſin. act. 1. ſcen. 2.
[o] In Catone, p. 339. See alſo de ſolert. animal. p. 970.
[p] See Herodot. l. 7. n. 133.

of

of their ſoldiers, that they might purſue the enemy with more ardour, and finiſh his entire defeat[q]? I could ſtill touch upon other facts as diſhonourable for the Athenians; ſuch, for example, as the equally unjuſt and cruel manner of condemning Socrates to death. This judgment will in all ages be a blot that all the luſtre of their glorious actions will never be able to efface. Such an infamy can only be attributed to that inconſtancy and fickleneſs which preſided for the moſt part over all the proceedings of the Athenians, and rendered this people ſuſceptible of all impreſſions.

It is certain, that the Athenians in general had as much wit as any people ever had; but, if we may be allowed to ſay it, they had too much of it, and to ſuch a degree as to outrun their judgment. They were not enough on their guard againſt their imagination, which often carried them beyond all juſt bounds. Hence comes their ſingular inclination for fables and chimeras. They were extremely fond of hearing them, provided they were gracefully preſented, and delivered with wit. To this taſte for ſingular and extraordinary facts, is commonly attributed, and with a good deal of reaſon, a great part of the tales which Herodotus has ſown in his hiſtory. He knew the Athenians, and ſought to pleaſe them. In that view, he has been leſs delicate and leſs ſcrupulous in the choice of facts than probably he would have been, without that deſire of being read and admired by a people naturally fond of the marvellous and of the extraordinary. Do we not alſo know that Demoſthenes was more than once obliged to have recourſe to ſuch like artifices to catch the attention of his audience, and that at times when no leſs than the ſafety of their country was at ſtake?

To define the Athenians in few words, they were a mild, humane, and beneficent people, magnanimous, generous, moſt brave and moſt warlike, having beſides great talents for commerce and ſea-affairs; but at the ſame time

[q] Diod. l. 13. p. 623. &c.; Valer. Maxim. l. 1. c. 1. extern. n. 8.; Xenoph. de reb. geſt. Græc. l. 1. relates this fact a little differently.

light, touchy, and capricious, hot-headed, haughty, and inconſtant; polite, moreover, and delicate in point of decorum, the times of which I ſpeak being conſidered, ſenſual and voluptuous, taken up with a fine picture, a beautiful ſtatue, paſſionately fond of ſpectacles, lovers of the ſciences and fine arts in every kind and branch; curious, in a word, of news, and very talkative, ſprightly, humorous, fond of drollery and jeſts, of quick feelings, and expreſſing themſelves with the moſt exquiſite taſte and delicacy; having produced beſides many men of wit as brilliant as ſolid, and many great and ſublime geniuſes.

ARTICLE III.

Of the plays or games of the Greeks.

I Should think I omitted an article eſſential to the knowledge of the manners of the Greeks, if I did not ſay ſomething of the different plays eſtabliſhed very anciently among theſe people. It is known, that by the term *plays* or *games* we are to underſtand thoſe great and magnificent ſpectacles, where many bands of combatants diſputed the prize in the various bodily exerciſes which made the ſubject of the plays I ſpeak of. There was a conſiderable number of them eſtabliſhed in ſeveral parts of Greece; but the moſt ſolemn were the Olympic, the Pythian, the Nemæan, and the Iſthmian games. Theſe ſorts of feſtivals were continued for many days. I ſhall not dwell upon the whole apparatus and all the ceremonies obſerved there, nor enumerate all the different combats, ſuch as the wreſtling, the pancratium, or mixed combat, the boxing, the race, the quoits, &c. in which they were exerciſed. My buſineſs is only to conſider the end and motives of the eſtabliſhment of theſe games.

I have already remarked elſewhere, that it was cuſtomary amongſt almoſt all civiliſed people, to eſtabliſh feſtivals and contrive public diverſions, to qualify the fatigue and laſſitude

laſſitude which muſt be the conſequence of continual application to work, or to remedy the lingering irkſomeneſs inevitably and neceſſarily attached to a life of conſtant idleneſs. But the legiſlators juſtly perſuaded that the multitude were too much the ſlaves of ſenſe, and too little enlightened to be able to find ſufficient recreation in intellectual amuſements only, endeavoured to rouſe and divert them by ſenſible and ſtriking objects. In this view, they thought, in all times, of diverting the people by ſubjects proportioned to their underſtanding and taſte; I mean by ſpectacles, whoſe outward ſhow ſhould ſtrike the ſenſes and produce ſtrong impreſſions. But we alſo ſee, that moſt legiſlators gave their attention at the ſame time to the means of rendering theſe ſorts of diverſions uſeful and profitable.

Theſe two motives are eaſily diſcovered in the eſtabliſhment of the games of Greece. Thoſe who inſtituted them, had not ſolely regarded the pleaſure and amuſement of the multitude. They had mingled, in theſe eſtabliſhments, views of very wiſe and refined policy. Greece is in general a pretty hot country. We know that the temperature of ſuch climates commonly renders the body ſoft and effeminate. By annexing ideas of the greateſt glory to the ſucceeding in exerciſes, which demand great force and addreſs, it was deſigned to render the body more pliant, ſtronger, and more vigorous than it commonly is in hot countries. They wanted thus early to prepare the youth for the painful toils of war, and at the ſame time to make them fitter to carry arms. By means of the exerciſes I ſpeak of, the young people were accuſtomed to fatigue from their infancy, and were thus rendered more firm, more warlike, more intrepid, and more dexterous, eſpecially in combats where ſtrength of body and addreſs generally decided the victory, as they did in ancient times; becauſe, the uſe of firearms being unknown, they were commonly obliged to approach very near. The advantages which the Greeks drew from the different exerciſes to which they were enured from their infancy, appeared ſenſibly in the wars which they

had to maintain againſt the Perſians. With a handful of men, they defeated innumerable armies. Herodotus pretends, that one ſingle Greek maintained his ground againſt ten Barbarians[r]. This great hiſtorian further obſerves, that thoſe who ſignaliſed themſelves the moſt in the battles of Marathon, of Salamis, and Platea, had almoſt all of them gained the prizes in the games I have ſpoke of[s].

Let us alſo remark, with what addreſs the inſtitutors of theſe games had found the art of exciting that noble emulation, and that generous ardour for glory, which are, and always will be, the beſt rampart and firmeſt ſupport of a ſtate. In the origin, the conquerors received for their whole reward only a ſimple crown of wild olive at the Olympic games, of laurel at the Pythean, of green ſmallage (a kind of parſley) at the Nemæan, and of dry ſmallage at the Iſthmian games[t]. The authors of theſe eſtabliſhments had deſigned to inculcate, that honour alone, and not a ſordid intereſt, ought to be the end and reward of victory. We may judge what might be performed by a people accuſtomed to be conducted by ſuch principles. Tygranes, one of the principal officers of the troops of Xerxes, hearing talk of what were the prizes of the Grecian games, turned towards Mardonius, who commanded in chief the whole army of that monarch, and, ſtruck with aſtoniſhment, exclaimed, "Heavens! with what men are you going to engage! "inſenſible to intereſt, they combat only for glory." An exclamation full of ſenſe and judgment, whoſe force and truth was unfelt by Xerxes[u].

In fine, the principal motive, and that which we ſhould moſt admire in the eſtabliſhment of the games I have ſpoke of, was the opportunity which theſe ſpectacles afforded all the inhabitants of the different cities of Greece of ſeeing each other, and continuing aſſembled for ſome time in the ſame places. It was, in effect, the part of prudence and ſound policy, to procure theſe people all poſſible means of

[r] L. 9. n. 61. [s] L. 9. n. 104.
[t] Journ. des ſcav. Fevrier 1751, p. 117.
[u] Herod. l. 8. n. 26.

uniting,

uniting. The Greek nation, compoſed of a multitude of little ſtates jealous and envious of each other, had need, for their preſervation, of ſome common centre where all its inhabitants might often find themſelves united and mingled indifferently with the moſt perfect equality. This is what happened in theſe games, whither repaired an incredible number of ſpectators from all parts of Greece. By this concourſe was formed, without any apparent affectation, a ſort of bond of correſpondence, and, if one may call it ſo, a ſort of confraternity, amongſt the citizens of all the different Grecian cities. Too many occaſions therefore could not be contrived for their being together, and ſeeing each other familiarly. I have already made the remark in ſpeaking of the eſtabliſhment of the council of the Amphyctions *.

But the inſtitution of public games was ſtill more proper to operate ſuch a union and concord as I have ſpoke of. The diverſions which they partook of at Olympia, and the other places where theſe games were celebrated, naturally diſpoſed the minds to good humour and gaiety. They had daily occaſion to ſee and converſe with each other. It even often happened, that this familiarity and habitual commerce engaged many citizens of different republics to join in the bonds of hoſpitality. It is thus that they could without any formalities treat in a friendly manner of the reciprocal intereſts of each community. The Greeks at theſe times appeared to be, in a manner, inhabitants of one and the ſame city. They offered in common the ſame ſacrifices to the ſame gods, and participated the ſame pleaſures †. By this means they obtained the calming of grudges and terminating of quarrels, by ſtifling animoſities. They had fair oportunities, in theſe grand aſſemblies, of effacing thoſe popular prejudices which are often kept up only for want of knowing the nation againſt whom a prejudice is conceived.

* See part 2. book 1. chap. 3. art. 1.

† See Strabo, l. 9. p. 642.

Add

Add to this, that, during all the time of theſe ſpectacles, there was a general ſuſpenſion of arms throughout all Greece, that they might aſſiſt at them with more tranquillity and ſatisfaction. Then all hoſtilities ceaſed, and every movement of war was interrupted [z]. It is eaſy to perceive how much ſuch a cuſtom muſt have contributed to bring about a union of hearts, and ceſſation of troubles and diviſions. The celebration of the games, by reſtoring peace and tranquillity for a time, readily diſpoſed their minds to ſecure the advantages of them irrevocably. We regard the inſtitution of the games of Greece in every reſpect as a maſterpiece of policy and prudence.

It is true, that in after times this eſtabliſhment, ſo wiſely contrived, degenerated greatly from its primitive inſtitution, and even gave room for ſtrange abuſes. The idea of rendering themſelves uſeful to their country, and forming themſelves to the uſe and handling of arms by bodily exerciſes, diſappeared. The Athletes made a profeſſion apart, which from thenceforth devoted their talents to the ſenſeleſs deſire of acquiring a vain-glory, and honours as ſteril as frivolous. They entered the liſts only as actors in a ſpectacle, to make ſhow of their ſtrength or addreſs, and attract the applauſe of the public by diverting it. They carried the exerciſes beyond all bounds, and puſhed the exceſs ſo far as to be continually in danger of loſing their lives, or being crippled for the reſt of their days [a]. Then might be juſtly applied to the games of Greece that bon mot ſo boaſted amongſt the ancients: "If it is ſeriouſly and "in good earneſt that ye fight, ye do not do enough; but "if it is only in jeſt and for amuſement, ye do too much." Let us remark further, that ſuch ſpectacles were only fit to familiariſe the ſpectators with violence and inhumanity. Theſe combats muſt neceſſarily leave upon the mind impreſſions of cruelty and barbarity, the conſequences of which are always extremely to be feared *.

It

[z] Thucyd. l. 5. n. 49.; Plut. in Lycurg. p. 54. C.; Pauſan. l. 5. c. 20.

[a] See Lucian. in Anacharſi.

* There is a celebrated nation in Europe which is reproached with a certain

It happened alſo, that the people taking too great a taſte for that kind of amuſement, went ſo far as to neglect for it their own proper affairs. They paſſed the time in ſeeing the ſet combats of the Athletes, who inceſſantly repeated their exerciſes, that they might appear with more ſucceſs in the public and ſolemn games. The ambition of carrying the palm became at laſt a general and univerſal madneſs. They deſpiſed the ſtudy of the moſt uſeful and neceſſary arts, to occupy themſelves entirely in uſeleſs trials of ſkill. The taſte for gymnaſtics was a kind of epidemic malady which ſpread over all Greece. Gluttony and drunkenneſs ſoon joined that depravation of manners. Theſe vices became, ſo to ſpeak, the particular appendage of the Athletes. Thoſe who originally had addicted themſelves to that profeſſion, regarded frugality as the moſt proper means for preſerving their ſtrength and addreſs; they lived only on nuts, dry figs, and cheeſe [b]. This too auſtere regimen diſpleaſed the maſters of the liſts, who roſe inſenſibly throughout Greece, and formed at length a particular profeſſion. They permitted their pupils the uſe of fleſh. The moſt ſolid and ſucculent, ſuch, in a word, as afforded the ſtrongeſt and moſt abundant nouriſhment, was preferred to all other aliments [c]. It can ſcarce be conceived to what exceſs the Athletes carried their voracity in the latter times. Hiſtory ſays, that Milo Crotonienſis was not yet ſatisfied after having eat twenty minæ of fleſh *, and as much bread, and drank three

certain ruggedneſs, let us even ſay a certain ferocity in their manners and conduct: may not one attribute the particular ſpirit which reigns in the nation I ſpeak of, to the taſte the people have preſerved for ſpectacles of gladiators?

[b] Plin. l. 23. ſect. 63. p. 305.; Pauſ. l. 6. c. 7.; A. Corn. Celſus, l. 4. c. 6.; Diog. Laert. l. 8. ſegm. 12.

[c] *Autores ſupra laudati.*

* The twenty minæ of fleſh amounts to more than 14 pounds Paris weight, and the congii of wine to ten pints and about a chopin of the ſame meaſure.†. The ſtory which the ancients tell us of the bull of four years old that Milo eat all up in a day, after having carried it upon his ſhoulders the length of a ſtadium, may, I think, be regarded as an idle fable. Athen. l. 10. c. 2. p. 412.

† *See the table at the end of the firſt diſſertation.*

congii

congii of wine [d]. Another of theſe Athletes eat to the rate of fourſcore cakes a-day [e]. This ſort of people at that time made a part of their ſuperiority over other men conſiſt in a monſtrous and exceſſive voracity [f].

Then alſo diſappeared that diſintereſtedneſs ſo pure, ſo noble, and ſo abſolute, which had originally animated the combatants. At firſt only a ſimple crown of laurel had been allotted to the conquerors for their reward. In the end, the privilege of being fed at the public expenſe was granted to ſuch of the Athletes as had been victorious. They were not long of abuſing it, even ſo far as to become a great burthen upon the cities and upon the people. This abuſe appeared ſo heavy to Solon, that he thought himſelf obliged to remedy it, and reduce the penſions of the victorious Athletes. He aſſigned only 500 drachmas to thoſe who had carried the prize in the Olympic games, one hundred to thoſe who had been crowned at the Iſthmian games, and ſo of the others in proportion [g]. This legiſlator found that it was ſhameful to give ſuch ſums to mere wreſtlers, which it were much more juſt and more uſeful to employ in maintaining and rewarding the children of thoſe who had fallen ſword-in-hand in the ſervice of their country [h]. To judge of the juſt contempt the Athletes had fallen into, we muſt hear Euripides. "Amongſt the infinite evils which reign in Greece," ſaid this famous poet, "there is none more pernicious than the profeſſion of the Athletes; for, in the firſt place, they are incapable of conduct. How, in effect, ſhall a man ſubject "to his palate and become a ſlave to his belly, how can he procure a fund ſufficient for the ſubſiſtence of his family? Moreover, the Athletes know not what it is to endure poverty by ſuiting themſelves to fortune; for having no foundation of good principles, hardly do they

[d] Athen. *loco cit.*
[e] Theocrit. Idyll. 4.
[f] See Athen. l. 10. c. 2.; et Galen. de digneſt. puſſ. l. 2. c. 2.
[g] Plut. in Solon. p. 91.; Diog. Laert. l. 1. ſegm. 55. [h] Id. ibid.

"change

" change their character even in diſgrace. I cannot," continues Euripides, " approve the cuſtom of the Greeks " of forming numerous aſſemblies to honour ſuch frivolous " diverſions. For let one of them excel in wreſtling, " let him be nimble in the race, let him know how to " throw a quoit, or apply a vigorous blow on the jaw of " his antagoniſt, what is his country the better of theſe " fine talents, or of the honour he gains by them? Will " he repulſe the enemy by the force of his quoit, or put " him to flight by exerciſing himſelf in the race armed " with a buckler? Theſe follies are not the buſineſs of " the field," &c. [i]. It is thus that the inſtitution of the public games of Greece, that is to ſay, one of the fineſt and wiſeſt inventions, was inſenſibly corrupted, and at laſt degenerated ſo far as to become a moſt pernicious abuſe.

I muſt alſo take notice, that the beſt writers of antiquity have thought it juſt to attribute to the ſpectacle of the Athletes, that infamous paſſion to which the Greeks were but too much addicted. This ſort of actors always appeared in public entirely naked. The nature of the exerciſes which made the ſubject of the games I ſpeak of, joined to the heat of the climate, and the ſeaſon of their celebration *, neceſſarily required them to be naked. The Athletes were accuſtomed to that indecency from their earlieſt youth; for to ſucceed in the profeſſion which they embraced, they could not apply to it too early. The habit of appearing before each other continually naked, ſoon deſtroyed every ſentiment of modeſty, and introduced amongſt the Greeks that horrible corruption with which they have been ſo often reproached [k]; a depravity which was moreover fomented by the little commerce and familiarity which ſubſiſted in that nation between the ſexes. I have already

[i] Acad. des inſcript. t. 1. m. p. 217. See alſo Lucian. in Anacharſi; Athen. l. 10. p. 413. 414.; Plut. quæſt. Rom. p. 274.

* It was in the month of July.

[k] *Mihi quidem hæc in Græcorum gymnaſiis nata conſuetudo videtur, in quibus ipſi liberi & conceſſi ſunt amores.* Cicero, Tuſcul. quæſt. l. 4. n. 33. Ennius had ſaid before Cicero, *Flagitii principium eſt nudare inter cives corpora.* *Apud* Cicer. *loco cit.* See alſo Plut. t. 2. p. 274. 751.

ſpoke of it [l]. I ſhall only add, that the women never aſſiſted at the public games. They were even forbid under grievous penalties to approach the place where they were celebrated [m].

It remains, that I ſpeak a word of the theatre of the Greeks, and of the taſte which the Athenians particularly had for that diverſion. We know, that theatrical repreſentations took birth amongſt the Greeks, and that to them alone the invention is due; we may fix the epocha of it to about the year 590 before Jeſus Chriſt. Theſe ſpectacles were in uſe only at certain times of the year, and particularly at the celebration of the feaſts of Bacchus.

I ſhall not ſtop to examine the origin and various progreſs of the theatre amongſt the Greeks. The reader may conſult on this ſubject the authors who have made it the principal object of their reſearches. Some ſummary ideas will, I think, be ſufficient for the end I have propoſed.

It is to the Athenians, without contradiction, that the Greek theatre is indebted for that degree of perfection to which we ſee it was carried. They ſpared nothing that could any wiſe contribute to it. This people, voluptuous, but delicate in their pleaſures, eſtabliſhed a concourſe of authors, and commiſſaries named by the ſtate to judge of the merit of the pieces. None were allowed to be played till they had firſt undergone examination [n]. That which obtained the plurality of ſuffrages, was declared victorious, crowned as ſuch, and repreſented at the expenſe of the republic with all poſſible pomp and magnificence. it is eaſy to perceive how much ardour and emulation theſe

[l] Supra, p. 227.

[m] Ælian. var. hiſt. l. 10. c. 1.; Pauſ. l. 5. c. 6. We muſt however in this reſpect do juſtice to the Greeks. The law which forbade the women to aſſiſt at the public games, was very wiſe, and very conformable to public decency and modeſty. Decorum demands that the ſex ſhould not be admitted to moſt of theſe ſpectacles, where the actors always appeared entirely ſtripped of cloathing.

[n] See Plut. in Cimone, p. 483. E.

diſputes

diſputes and theſe public rewards muſt have excited amongſt the poets, and how much ſuch an uſage muſt have contributed to the perfection of dramatic pieces in Greece.

We cannot in this reſpect but applaud the Athenians for the taſte and ſenſibility they teſtified for theatrical repreſentations; a diverſion the moſt ingenious, the moſt noble, and the moſt uſeful, perhaps, that can be procured for the multitude. But we muſt at the ſame time condemn the exceſs into which this people fell in the end. The Athenians very ſoon carried their eagerneſs and their paſſion for the theatre to ſuch a point, as to make it their ſole occupation, and even to ſacrifice to it the intereſts of the ſtate. The funds deſtined for their armaments by ſea and land, were employed and conſumed in the ſervice of the drama. "They are more aſſiduous at the ſpectacles," ſays Juſtin, "than at military exerciſes. The theatres are full, but "the camps deſerted. Bravery, capacity, and the art of "war, are reckoned for nothing. Great captains are no "longer applauded. There are no acclamations but for "good poets and excellent comedians [o]."

Theſe reproaches are not exaggerated. It is certain, by the unanimous teſtimony of antiquity, that, in the time of Pericles, the Athenians gave up all buſineſs, and neglected all affairs, to employ themſelves entirely with the theatre. We ſee alſo, that to embelliſh it, and have the pieces that pleaſed them played with all the apparatus and all the magnificence they could admit, they drained the treaſure and reſources of the ſtate [p]. If Solon had been believed, this taſte for dramatic pieces had ſoon fallen, or at leaſt would not have cauſed ſo many diſorders. Theſpis, who is commonly looked upon as the inventor of the theatre, by reaſon of the improvements he made in the firſt eſſays that Greece had ſeen of this ſpectacle, flouriſhed in the time of Solon. This great legiſlator would judge of that novelty

[o] L. 6. c. 9.

[p] Demoſthen. Philipp. 1. p. 52. C.; Olynth. 2. p. 24.; Plut. t. 2. p. 348. 349. 710, 711.

by himſelf. Theſpis played his own pieces, as was the cuſtom of the ancient poets. When the repreſentation was finiſhed, Solon called Theſpis, and aſked him, if he were not aſhamed to lie thus before ſo many perſons. Theſpis anſwered, that there was no harm in theſe lies and theſe fictions, which were only made in ſport, and for diverſion. "Yes," replied Solon, ſtriking the ground ſtrongly with his ſtick, "but if we ſuffer and approve this fine ſport, "it will ſoon make way into our contracts and all our "affairs [q]."

We muſt allow, nevertheleſs, that the Greek tragedians always preſerved great reſpect for virtue, juſtice, purity of manners, and public decency. Their poems abound in admirable maxims; but we cannot too much exclaim againſt the licence which reigned in the Greek comedy. I have ſpoke elſewhere of the groſs obſcenities ſo abundant in the comedies of Ariſtophanes [r]. I have nothing more to ſay of them. I ſhall only remark, that, beſides their indecency and groſſneſs, the moſt mercileſs ſatire, the roughеſt and moſt biting, reigns through them all. The comic poets of thoſe times took all liberties and ſpared no body. The generals, the magiſtrates, the government, the people, even the gods themſelves *, all was abandoned to their ſatiric bile. The exceſs was carried ſo far, that they were not at the pains to diſguiſe even the names of the perſonages they would defame. Every one was introduced upon the ſtage under his true name [s]. This was not all: for fear that a reſemblance of names might cauſe miſtakes, and leave ſome uncertainty in the minds of the ſpectators, they gave the actors maſks which repreſented, as far as was poſſible, the viſage and phyſiognomy of thoſe they wanted

[q] Plut. in Solon. p. 95. [r] *Supra*, p. 228.

* We muſt however, in this reſpect, remark, one ſingular exception. Ariſtophanes, the moſt licentious, without contradiction, of all the comic poets of the ancient theatre, never durſt allow himſelf any liberties againſt Ceres, nor in general againſt any thing which might relate to the worſhip of that goddeſs.

[s] See Ariſtophan. in nubib. in equitib. &c.

to expoſe to the deriſion of the public [t]. Such, for a long time, was the Grecian comedy; that is to ſay, it was a ſpectacle equally licentious and ſatirical, without decency or modeſty, without reſpect of perſons, without regard to morals, for which nothing was ſacred, and where they might openly defame all whom they thought fit to render the object of public contempt. The magiſtrates were at length obliged to repreſs that pernicious abuſe, and to reſtrain, by ſevere prohibitions, the unbridled licence of the comic authors [u]. Theſe wiſe regulations gave birth to what the ancients have called the *new comedy*, which then became only an imitation, and a fine and delicate ſatire on the manners of private life. They no longer brought upon the ſtage any but feigned adventures and ſuppoſed names. As this advantageous change was brought about in ages greatly poſterior to thoſe whoſe manners I have undertaken to paint, I ſhall dwell no longer upon this ſubject [x].

[t] See les mem. de l'acad. des inſcript. t. 4. p. 134. &c.
[u] See Cicer. philoſophic. frag. t. 3. p. 393.
[x] Horat. ars poet. v. 281. &c.

RECAPITULATION.

BY bringing together all I have ſaid of the ſtate of ancient nations, in the ages which elapſed from the deluge to the time of Cyrus, it is eaſy to perceive how greatly human knowledge was formerly bounded and imperfect. Politics, laws, arts, ſciences, commerce, navigation, the art-military, even the manners, that is to ſay, the principles and turn of mind the moſt eſſential and moſt neceſſary for the preſervation and happineſs of ſociety; all theſe great objects were, if we may ſo expreſs it, but as yet in the rough draught in the time of Cyrus, and yet the reign of this prince preceded the Chriſtian æra only 536 years. A ſlight detail will convince us of the truth of all theſe propoſitions.

During all the ſpace of time that we have run over, they had but very imperfect notions of the great art of government. The moſt part of political and civil laws were obſcure and defective, often even pernicious or ridiculous, in a word, without form or order. The rights of nations were unknown, and morality in general little underſtood; it even often authoriſed principles which led directly to the greateſt vices. As to that political ſyſtem which now takes in and regards the whole univerſe, we may affirm, that the ancients had no idea of it. There was then no power who thought of keeping up a regular correſpondence in the different parts of the known world. The leagues even which neighbouring ſtates might have amongſt themſelves, were but momentary. The preſent inſtant was all that was regarded. The conſequences of any ſtep or event were rarely foreſeen and examined into. They formed no political ſyſtem. Every ſtate ſtood ſingle, and gave little attention to the general motions of the machine. Accordingly they were not accuſtomed to keep ambaſſadors reſident in foreign courts. The ancients were

not

not enough enlightened to perceive the utility of this ſort of privileged ſpies*, who, attentive to the minuteſt ſteps, are able to penetrate and lay open the projects which may be formed by a too enterpriſing power. Thus the famous ſyſtem of the balance of power, the object of modern politics, far from having been followed anciently in any part of the univerſe, does not even appear to have ever entered the head of any politician of antiquity.

What I have juſt ſaid of laws and politics, may very well be applied to the arts. The nations I have had occaſion to ſpeak of, had, in certain reſpects, made but a very middling progreſs in the general circle of them. They had indeed ſome rich and curious manufactures of ſtuffs. They underſtood the working of metals. They had raiſed ſome ſtructures of aſtoniſhing grandeur and richneſs; in a word, they handled the chiſel, the punch, and the graver. Yet theſe ſame people were deſtitute of moſt of the conveniencies of life, which are now regarded, and juſtly too, as very eſſential, or, at leaſt, as moſt agreeable. The ancients were abſolutely ignorant of the ſecret of procuring them. I have given ſufficient proofs of this, as often as I have had occaſion to treat upon the ſubject.

We muſt ſay the ſame thing of the ſciences. We cannot refuſe to the Egyptians, Babylonians, Phœnicians, and Greeks, a pretty extenſive knowledge in aſtronomy, geometry, and mechanics. Yet they were never able to ſoar beyond a certain pitch, for want of knowing how to procure themſelves many helps, which are abſolutely neceſſary to the progreſs of the ſciences I ſpeak of. They wanted, for inſtance, pendulums and teleſcopes, and, in a word, many other inſtruments, without which aſtronomy and geography can acquire abſolutely no kind of preciſion. The ancients were deſtitute of even the moſt ordinary and indiſpenſable means of aſcertaining their diſcoveries. The reader may recall what I have ſaid upon the tedious and awkward manner of writing in the early times, upon the in-

* It is thus that one of the greateſt politicians of the laſt age defined ambaſſadors and envoys.

conveniencies

conveniencies of the form of books, and upon the difficulty of carrying, and, in general, of obtaining the reading of them*. It was anciently only by force of travelling that ſome knowledge could be acquired. As to phyſics and natural hiſtory, we know that they were almoſt entirely unknown to the ancients.

For commerce and navigation, it is certain that the Phœnicians particularly had made a conſiderable progreſs, and not a few diſcoveries, conſidering the obſtacles they had to ſurmount. But if, at the ſame time, we reflect upon the faulty conſtruction of their ſhips, the imperfection of their manner of working them, their abſolute want of inſtruments proper to direct their navigation, and the clumſineſs, in a word, of all their practices, we ſhall admire the courage of theſe people rather than their ſkill. We muſt applaud their courage for daring ſuch enterpriſes with ſuch poor helps, and at the ſame time be convinced of their inferiority in reſpect to the diſcoveries we are at preſent poſſeſſed of. It appears to me, that the ancients were very enterpriſing, but very little enlightened.

The art of war was to the full as imperfect as any of the objects I have juſt ſpoke of. We ſhould never have done, if we were to point out in detail the imperfection of the military manœuvres of the ancients in the ages which have fixed our attention, and ſhew all that failed them in point of art, ſkill, and capacity. I think it ſufficient to refer to what I have ſaid on the ſubject in the different parts of my work.

I ſhall do the ſame with regard to the manners. The reader may have remarked in all the articles where I have had occaſion to treat of this object, to what a degree the manners of the firſt people were unprincipled, barbarous, groſs, and vitious. Their want of delicacy, and their ignorance of the firſt principles of morality, are perceptible where-ever we conſult ancient hiſtory.

I do not therefore fear to aſſert, that in all the ſpace of

* See part 1. book 2. chap. 6. p. 187. 188.; book 3. chap. 2. art. 6.

time

time we have here gone over, human knowledge was yet moſt limited and moſt imperfect. Amongſt moſt nations, laws, arts, and ſciences were yet almoſt in their infancy. The Egyptians, the Babylonians, and the Phœnicians, who ſhould certainly be placed in the rank of the moſt civilized nations that have appeared in antiquity, had made but a very middling progreſs in each of the objects I have indicated. As to the Greeks, who in courſe of time every way excelled the Egyptians, Babylonians, and even the Phœnicians; the Greeks were yet very ignorant in the time of Cyrus, the epocha of the third and laſt part of our work. Near two ages elapſed between thoſe which cloſe our reſearches, and the times in which the Greeks made moſt of the diſcoveries which obtained them that glory and juſt eſteem they yet at preſent enjoy, and of which nothing can ever rob them. No body has yet ſurpaſſed them in poetry, in eloquence, nor in the art of writing hiſtory. It is not quite the ſame thing with the demonſtrative ſciences, nor even with many parts of the arts. It muſt be allowed, that, if we except architecture *, ſculpture, and the graving of precious ſtones, no compariſon can be made between what the Greeks knew of the objects I have juſt indicated, and what we know of them at preſent.

* Let us obſerve nevertheleſs, in relation to architecture, that the Greeks had indeed a very juſt and refined taſte for the conſtruction of grand edifices; but I do not think it was the ſame with reſpect to private buildings. I think I may affirm, that they knew not the art of diſpoſing them ſo elegantly and ſo commodiouſly as is the practice with us at this time.

DISSERTATION I.

On the valuation of the Greek money and meaſures.

I Have often had occaſion, in the courſe of the work which I preſent to the public, to ſpeak of antique money and meaſures. As it is to the Grecks that we are indebted for the greateſt part of the knowledge that remains to us of profane antiquity, it is almoſt always to the Grecian ſtandard that we are to reduce the money and meaſures of ancient nations. I have therefore thought it proper to give a valuation of thoſe monies and of thoſe meaſures, which ſhould juſtify the proportion which I have eſtabliſhed between them and ours. Beſides, by conſulting this kind of table, the reader will be enabled to make, with eaſe and by himſelf, the reductions which I may have omitted.

There is perhaps no ſubject which has more exerciſed the critics, than the determination of ancient monies and meaſures. Perhaps, however, there is none which is yet enveloped in greater obſcurity. I am very far from flattering myſelf with having made this matter clear. I propoſe only to ſay what appears to me the moſt probable on a ſubject ſo uncertain, without pretending in any manner to give an abſolute excluſion to the valuations which have already been imagined, and to which I have not thought myſelf obliged to conform.

CHAP. I.

Of the Grecian money.

THE value of coins, we know, depends upon their ſtandard, and upon their weight. There is yet found at this day,

day, in the cabinets of antiquaries, many Greek coins in general, and in particular Attic coins. Theſe laſt are thoſe which are moſt frequently mentioned in ancient authors, and thoſe to which they have commonly referred all the others. We ſhall follow their example, and ſhall take the Attic coins for ſtandard pieces. Many of them have been aſſayed, and, by various reiterated experiments, a certainty has been obtained, that the gold and ſilver employed by the mint of Athens, were, to a very ſlight difference, of the ſame ſtandard with the gold and ſilver employed in our coins. This fact is therefore very certain, and upon this article we have all the light we can deſire.

But it is by no means ſo eaſy to determine what was the fixed and preciſe weight of theſe coins. Almoſt all thoſe which remain to us at this day, have been more or leſs impaired by the uſe which has been made of them for ſo many ages, or through lapſe of time. It is in ſome ſort morally impoſſible to find two Attic drachmas, for example, which weigh preciſely one as much as the other. It has been neceſſary therefore to have recourſe to ſome other expedient to aſcertain the weight of antique coins. Of all thoſe which have been imagined, the moſt philoſophical is without contradiction that which Gaſſendi made uſe of about the middle of the laſt century. The idea of it was ſuggeſted to him by the celebrated M. De Peireſc, whom nothing eſcaped that could any way contribute to the advancement of human knowledge, and who ſpared no expenſe for that purpoſe.

There is ſeen at Rome, in the palace of Farneſe, an antique congius perfectly well kept. The congius, amongſt the Romans, was a liquid meaſure containing ten Roman pounds of wine *. That of which we ſpeak, is by ſo much the more valuable, as it appears, by the inſcription it bears, that this veſſel was depoſited in the capitol in the reign of Veſpaſian, to ſerve for a ſtandard of that kind of meaſure. M. De Peireſc cauſed a model to be made of it, which he took care to verify exactly by the original. It is with this

* *Congius vini decem pondo fiet.* Feſtus, voce *Publica pondera*, p. 402.

model, which did not arrive in France till after the death of M. De Peireſc, that Gaſſendi made the experiment I am about to ſpeak of.

He filled this congius with well-water, which he weighed very ſcrupulouſly, and found, that it contained ſix pounds fifteen ounces ſix groſs, Paris weight *. Gaſſendi, from that experiment, concluded, that the ancient Roman pound was the tenth part of this weight, that is to ſay, eleven ounces $28\frac{4}{7}$ grains, and that, of conſequence, the Roman ounce, which was the twelfth part of it [b], conſiſted of ſeven groſs $32\frac{3}{7}$ grains [c].

We know that the drachma, which was a ſilver coin, weighed the eighth part of a Roman ounce [d]. The proportion of the other Attic coins is alſo known; ſo that the determination of the ancient Roman pound carries along with it that of the weight of the Greek coins. But this determination, ſuch as it has been made by Gaſſendi, appears to deſerve admiſſion only by ſo much as nothing more preciſe and more exact may be obtained upon the object here in queſtion. It ſuppoſes in effect, that the weight of the well-water which this philoſopher made uſe of to find the capacity of the Farneſian congius, is equal to that of wine; a ſuppoſition demonſtrated falſe by experience, which ſhews us, that wine is always lighter than water, eſpecially than well-water, which of all freſh waters is the heavieſt. Let us add, that the model of the Farneſian congius which Gaſſendi made uſe of, may poſſibly have not been preciſely of the ſame capacity as the original veſſel.

Theſe, without doubt, were the conſiderations which afterwards engaged M. Auzout, of the academy of ſciences, in a journey which he made to Rome towards the end of the

* See the table at the end of this diſſertation.

[b] *Uncia* - - - - - -
- - - *in libra pars eſt quæ menſis in anno.*
Fannius *in* carmine de ponderibus & menſuris.

[c] Vid. Gaſſend. in vita Peireſkii, l. 2. p 73.

[d] Δραχμὴ ἡ τὸ ὀγδοον τῆς ὀγκίας, Heſych. in voce Δραχμὴ.
Drachmæ octo Latinam unciam faciunt. Hyeronim. *in* cap. 4. Ezek.
Uncia ſit drachmis bis quatuor. Fannius, loco cit.

laſt

laſt century, to repeat the experiment of Gaſſendi upon the congius of the palace of Farneſe itſelf. Inſtead of well-water which Gaſſendi made uſe of, M. Auzout employed ſpring-water extremely light. The original congius was found by this experiment to contain ſix pounds twelve ounces ſeven groſs and 48 grains Paris weight, of water of the fountain of Trevi [c]. I think therefore, that we may conclude from this fact, that the ancient Roman pound was the tenth part of this weight, that is to ſay, ten ounces ſeven groſs twelve grains, and the ounce preciſely of ſeven groſs nineteen grains. I own however, that the argument drawn from the difference of the ſpecific gravity of wine and of water, militates almoſt as much againſt the experiment of M. Auzout, as againſt that of Gaſſendi. Reaſoning therefore would ſeem to lead us to eſtimate the Roman ounce at about ſeven gros $\frac{2000}{7777}$ only *. Nevertheleſs here are in two words the reaſons which determine me in favour of the opinion I have thought fit to embrace.

The ſame M. Auzout I have ſpoke of, ſatisfied himſelf, that the modern Roman pound was of ten ounces ſeven groſs twelve grains, and the ounce of ſeven groſs nineteen grains. It follows then, that the Roman pound and ounce of the preſent times are perfectly equal with the antique Roman pound and ounce, ſuppoſing, as we have ſaid, that the Roman congius ſhould contain preciſely ten pounds weight of ſpring-water. This perfect relation between the ancient pound and the modern (a relation which cannot have been the effect of chance), ſeems to demonſtrate, that the Roman pound has received no change for upwards of ſeventeen centuries, eſpecially if there is room to ſuſpect, that the ancient Romans know not the difference of weight between wine and water, or that at leaſt they had no regard to it, in fixing the ſtandard of their meaſures; and of this

[c] See tom. 6. des anc. mem. de l'acad. des ſcienc. p.

* This determination is drawn from the proportion between the ſpecific gravity of water and of Burgundian wine, which reſults from the calculations of M. Eiſenſchmid in his treatiſe *de ponder. et menſur. veter. Argentorati, in* 12°. 1728.

there

there is the cleareſt proof in the poem of Fannius, which we have already cited more than once [f].

The value of the ancient Roman ounce being once well determined, and of conſequence the weight of the Attic drachma, which was the eighth part of it; we ſhall eaſily come at the weight of the other Greek coins, ſuch as the talent, the mina, and the obolus. The drachma, in effect, contained ſix oboli, the mina 100 drachmas, and the talent 60 minæ [g]. The whole then may be reduced to a ſhort calculation which gives the values thus *:

The Attic talent weighed, of	marks.	ounces.	gros.	grains.
Paris weight	85	0	7	66
The mina	1	3	2	$57\frac{1}{2}$
The drachma	0	0	0	$65\frac{3}{8}$
The obolus	0	0	0	$10\frac{43}{48}$

According to this calculation, ſuppoſing ſilver of fifty livres tournois the mark,

	livres.	ſols.	deniers.
The Attic talent was worth	4256	3	8 $\frac{3}{8}$
The mina	70	18	8 $\frac{7}{96}$
The drachma	0	14	2 $\frac{95}{384}$
The obolus	2	0	0 $\frac{863}{2304}$

To this very ſummary epitome, I have thought fit to limit what I had to ſay upon the valuation of the Greek monies, and upon the proportion they might bear to ours. Let us paſs on to their meaſures.

[f] *Libræ ut memorant beſſum ſextarius addit,*
Seu puros pendas laticos, ſeu dona Lyæi.
Hæc tamen aſſenſu facile ſunt credita nobis,
Namque nec errantes undis labentibus amnes,
Nec metſi putei latices, aut fonte perenni
Manantes par pondus habent: non denique vina,
Quæ campi, aut colles nuperve, aut ante tulere.

[g] Τάλαντον . . . . μνῶν ἑξήκοντα ξ'. ἡ δὲ μνᾶ δραχμῶν ρ'. ἡ δὲ δραχμὴ ὀβολῶν ἓξ. Suid. voce Τάλαντον, t. 3. p. 425. See alſo the beginning of the oration of Demoſthenes againſt Pantænetus.

* See the table at the end of this diſſertation.

CHAP.

CHAP II.

Of the Grecian meaſures.

IT is at leaſt as difficult to determine exactly the value of the Grecian meaſures, as that of their money. The ſtadium, for example, was amongſt the Greeks an itinerary meaſure which is mentioned every inſtant in ancient authors. But they by no means agree upon the determination of that meaſure. In effect, we ſee, that the length of the ſtadium varied greatly according to times and places. There was no more uniformity amongſt the ancients in regard to that meaſure, than there is now amongſt us upon the length of our leagues, and in general upon that of all the itinerary meaſures which are actually in uſe in Europe. But as there is amongſt us a medium league, to which it has been agreed to refer all meaſures of the ſame name; ſo amongſt the Greeks there was a common mean ſtadium, to the determination of which I have thought proper to confine myſelf here.

The ordinary ſtadium, and that moſt univerſally adopted, conſiſted of ſix hundred Greek feet [h]. The plethra, another kind of meaſure, made the ſixth part of the ſtadium [i]. The arura, was the half of the plethra [k]. The orgia was ſix feet [l]; and, laſtly, the cubit a foot and a half [m]. We know that the Greek foot was more than the Roman foot by the 24th part of this laſt [n]. The determination of the

[h] Τὸ σταδιον ἔχει ποδας χ'. Suid. *in voce* Στάδιον, t. 3. p. 367.

[i] Ἔχει τὸ πλέθρον πόδας ρ'. Suid. *voce* πλέτρον.

[k] ἡ ἄρουρα πόδας ἔχει ν'. Id. *voce* Ἀρουραῖα μάντις.

[l] Δέκα μυριάδες..... ὀργυιων..... εἶεν χιλίοι σταδιοι. Herod. l. 4. n. 41.

[m] Πῆχυς..... ὁ εἷς καὶ ἥμισυ πούς. Heſych. *voce* Πῆχυς.

[n] *Stadium centum viginti quinque noſtros efficit paſſus, hoc eſt, pedes ſexcentos viginti quinque.* Plin. l. 2. ſect. 21. p. 86.

Now the ſtadium, which, as we have juſt ſeen, was preciſely 600 Greek feet, could not be 625 Roman feet, unleſs the Greek foot was to the Roman in the proportion of 25 to 24.

Grecian

Grecian meaſures is of conſequence as intimately connected with that of the Roman foot, as the eſtimate of the Attic coins is with that of the Roman pound.

Two ancient authors tell us, that the Roman amphora, a kind of liquid meaſure, ſince it contained eight congii, was preciſely a Roman cubic foot [o]. The water which this meaſure contained, muſt have weighed, by the experiment of M. Auzout, 54 pounds 7 ounces 5 groſs and 24 grains, Paris weight. Suppoſing, from the experiments of M. Eiſenſchmidt, that the weight of the ſpring-water which M. Auzout made uſe of was 371¼ grains to the cubic inch, (of the royal ſtandard foot), the capacity of the amphora muſt have been ſuch as, according to the Stereometrical rules, its ſide ſhould be leſs than eleven inches ¼ of a line, but more than eleven inches ⅓ of a line. The Roman foot muſt of conſequence be eſtimated at about eleven inches $\frac{17}{24}$ lines. Yet I think with M. de la Hire, that we ought to reckon the antique Roman foot preciſely eleven inches of the Royal ſtandard meaſure. I refer the reader to the memoir which that académician gave in upon this ſubject, to ſee the grounds of this valuation [p]. I ſhall content myſelf with obſerving only, that the Romans were never great mathematicians. I have proved above, that they reckoned nothing for the overplus of the weight of water more than of wine in the ſtandard of their meaſures. They may therefore very well have neglected and reckoned for nothing the three fourths of a line, or thereabouts, by which the ſide of the cube, which ſerved for the matrix of their amphora, ſurpaſſed their lineal foot. This conjecture will appear leſs difficult to be believed, when

[o] *Quadrantal vocabant antiqui amphoram, quod vas pedis quadrati octo et quadraginta capit ſextarios.* Feſtus *voce* Quadrantal.

Quadrantal vini octaginta pondo fiet, congius vini decem, pondo fiet. Idem *voce* Pulica pondera.

Pes longo ſpatio, atque alto, latoque notetur;
Angulus ut par ſit, quem claudit linea triplex.
Quatuor, et quadris, medium cingatur inane,
Amphora fit cubus. . . . Fann. *carm. cit.*

[p] Acad. des ſcienc. ann. 1714, m. p. 397.

it

it is conſidered, that about the end of the laſt century M. Picard diſcovered that the ſtandard of the Pariſian pint which was then made uſe of, wanted more than 1224 cubic lines of the capacity to which the ordinances had fixed that kind of meaſure [q].

Let us reſume all that has been juſt ſaid, and form this calculation from the principles we have laid down: ſince the Roman antique foot was eleven inches, the Greek foot was eleven inches five lines and a half: thus,

	fathoms.	feet.	inches.	lines.
The ſtadium was	95	2	11	
The plethra	15	5	5	10
The arura	7	5	8	11
The orgia		5	8	9
The cubit,		1	5	$2\frac{1}{2}$

It reſults from this calculation, that 24 ordinary ſtadia were only nine fathoms one foot ſeven inches $2\frac{3}{4}$ lines more than our common league of $2282\frac{1}{2}$ fathoms. I ſhall ſay nothing of the other ſtadia, as ſuch a diſcuſſion could be of little uſe to the work I have undertaken.

This were the place to ſpeak of the dry and liquid meaſures, and of the weights which the Greeks made uſe of in commerce. But we are almoſt entirely deſtitute of points of compariſon to fix the value of theſe weights, and of theſe meaſures. I ſhall therefore ſay but little upon this ſubject.

Fannius, whom I have already cited ſo often, tells us that the Attic pound was to the Roman as 75 to 96, or as 25 to 32 [r]. We ſee alſo, in the ſame poet, that the amphora or Attic cadus, which was a liquid meaſure, was equal to three Roman urns, or to a Roman amphora and a half [s].

Laſtly,

[q] See the treatiſe of M. Picard, *de menſur.*

[r] *Uncia fit drachmis bis quatuor. . . . .*
Unciaque in libra pars eſt quæ menſis in anno.
Hæc magna Latio libra eſt, gentique togatæ:
Attica nam minor eſt. Ter quinque hanc denique drachmis,
Et ter vicenis tradunt explerier unam.

[s] *Amphora fit cubus. . . . . .*

Laſtly, we read in the life of Atticus by Corn. Nepos, that the Attic medimnus, which was a dry meaſure, was equal to ſix Roman buſhels [t]. We know, by the teſtimony of Fannius, that the buſhel amongſt the Romans was the third of their amphora or cubic foot [u].

Reducing theſe weights and meaſures to ours, by means of the valuations of the pound and of the foot of the ancient Romans which I have given above, we ſhall find,

1. That the Attic pound weighed 8 ounces 4 groſs 7 grains and $\frac{1}{8}$ Paris weight.

2. That the Attic cadus contained one foot $268\frac{1}{2}$ cubic inches, or 41 pints one chopin $2\frac{1}{2}$ cubic inches, Paris meaſure.

3. Laſtly, that the Attic medimnus contained one foot 934 cubic inches, or four buſhels one litron and a half, and $9\frac{1}{4}$ cubic inches, Paris meaſure *.

This feeble eſſay is all we can pretend to, from all that is to be found moſt certain upon the ſubject we had undertaken to examine. The few monuments that remain of antiquity, and above all the unexactneſs of ancient authors in what they ſay of the coins and meaſures in uſe in their times, give us little room to hope for greater certainty.

Hujus dimidium fert urna. . . . . .
Attica præterea dicenda eſt amphora nobis
Seu cadus. Hanc facies, noſtræ ſi adjeceris urnam.

[t] *Univerſos frumento donavit, ita ut ſingulis ſex modii tritici darentur; qui modus menſuræ medimnus Athenis appellatur.* cap. 2.

[u] *Amphora ter . . . . . capit modium.*

* We ſuppoſe here the buſhel to be 648 cubic inches, that is to ſay, that it is conſidered as the 144th part of the muid of 54 cubic feet. The litron and half-litron are alſo ſuppoſed to be preciſely the ſixteenth and thirty-ſecond part of the buſhel of 648 cubic inches. I ſay ſuppoſed, becauſe theſe calculations are not perfectly conformable to the reſult given by the dimenſions of the cylindrical ſtandards of the meaſures I ſpeak of; dimenſions relative to the capacity aſſigned to theſe meaſures by the regulations.

DISSERTATION II.

On the aſtronomical periods of the Chaldeans.

WE are not ignorant of the uſe and advantage of aſtronomical periods in the ſupputation of time. We know alſo that the ancients had contrived many of them compoſed of a certain number of their years. Theſe periods were different according to the uſe they were deſigned for, and to the form of the year eſtabliſhed amongſt the nations who had contrived them. The names of three famous periods invented by the Chaldeans are handed down to us: the *Saros*, the *Neros*, and the *Soſos* [a]. Beroſus made uſe of them in compoſing his chronological calculations, and fixing the epochas of his hiſtory of Babylon [b]. It was by theſe meaſures of time, that he had regulated and determined the duration of that empire, and the length of the reigns of the different ſovereigns who had governed it.

The amount of the *Saros*, of the *Neros*, and of the *Soſos*, were certainly well known and well determined in the times that Beroſus compoſed his hiſtory. But the ancient monuments of the Babylonians are now no more. It is even many ages ſince they diſappeared. It is not therefore aſtoniſhing that there ſhould reign many contradictions amongſt modern authors, as well upon the number of years that compoſed theſe famous periods, as upon the uſes they may have been adapted for. Let us try however, by bringing together the different traits which are found ſcattered in ancient authors, to give ſome light into a queſtion ſo obſcure and ſo difficult.

It is certain by the teſtimony of all antiquity, that the

[a] Syncell. p. 17.; Abyden. *apud* eumd. p. 38. C.
[b] Syncell. p. 17. A.

Saros, the *Neros*, and the *Soſos*, were cycles which contained a certain number of years [c]. We ought not to liſten to ſome writers recent enough, who without any foundation would inſinuate, that the periods I ſpeak of ſhould be reduced to periods of days only. It is a chimera which deſerves no attention. We ſhall refute it in a moment. Without deigning therefore to dwell any longer upon it, let us examine what may have been the real amount of theſe cycles, and what their uſe in aſtronomy. Let us begin with the *Saros*, which, of all the periods of the Chaldeans, appears to have been the moſt celebrated in antiquity. Many authors have ſpoke of it [d]: but they do not agree upon the number of years of which that period was formed. Let us ſee whether it be poſſible to determine it at this day, and diſcover by that means what may have been the uſe of this cycle.

Syncellus tells us, after Beroſus, Abydenus, Alexander Polyhiſtor, &c. that the *Saros* was a period of 3600 years [e]. We know of no aſtronomical operation to which a period of that kind can be applied. Suidas, an author cotemporary with Syncellus, or at leaſt but little before him, gives to the *Saros* a very different amount. That author ſays, that it was a period compoſed of lunar months, the ſum total of which was eighteen years and an half [f]. Suidas cites no ancient author to warrant this fact, and does not tell us from what authority he gives the *Saros* an amount ſo different from that we have juſt ſeen. Though we ſhould agree with Suidas that the *Saros* might have been compoſed of 222 lunar months, yet we do not ſee what might have been the uſe of ſuch a period.

We might ſuſpect, it is true, that there is an error in the text of Suidas, and that, inſtead of 222 lunar months, we ſhould read 223. We might even bring a paſſage of Pliny to ſupport this conjecture. Pliny was indeed acquainted with a period of 223 lunar months [g]. In all the editions

[c] Beroſ. Abyden. & Syncell. *locis cit.*

[d] Beroſ. Abyden. Syncell. *locis cit.*; Suidas in Σάρος, t. 3. p. 289.; Heſychius in Σάρος.; Phavorin. &c.

[e] P. 17. 28. & 39. [f] In Σάρος, t. 3. p. 289. [g] L. 2. ſect. 10. p. 79.

anterior

anterior to that of P. Hardouin there had crept in a vitious reading, which, no doubt, had prevented a due attention to the amount and merit of that period. The former reading of the text of Pliny was 223 months. M. Halley, who was not leſs diſtinguiſhed for his profound erudition, than by being one of the greateſt aſtronomers of his age, was the firſt who perceived that falſe reading of the editions of Pliny. He propoſed the amendment of this vitious paſſage, and to read 224 months inſtead of 222 [h]. What was only conjecture on the part of this learned man, has been found, by the reſearches and diſcoveries ſince made, to be the true reading of Pliny [i]. It is therefore now no longer doubtful, that Pliny was acquainted with a period compoſed of 223 ſynodic lunar months. M. Halley wanted, with Suidas, to identify this period with the *Saros* of the Chaldeans; and this is the concluſion he draws from it.

From demonſtrating that the amount of the *Saros* muſt have been fixed at 223 lunar ſynodic months, that is to ſay, of 29 days and an half each, it reſults, ſays M. Halley, that this cycle contained near 18 of our years; a calculation, adds he, which agrees pretty well with the amount that Suidas gives the *Saros* [k]. This diſcovery, continues M. Halley, places in its full light the ſkill of the aſtronomers of Chaldea. In effect, that period furniſhes a very eaſy method of predicting eclipſes within the limits of the error of half an hour only [l]. Diodorus was, therefore, ill informed when he advanced that the Chaldeans had only a very imperfect theory of the eclipſes of the moon, and that they durſt neither determine nor foretel them [m].

Such is the reaſoning of M. Halley; but I think his conjectures much more ingenious than ſolid. The teſtimony of Suidas being ſupported by the ſuffrage of no author of antiquity, cannot balance that of Beroſus, nor of the other writers who give 3600 years to the *Saros*. Beſides, Suidas aſ-

[h] Tranſ. Philoſ. n°. 194. ann. 1692. p. 535.; Acta erudit. Lipſ. ann. 1692, p. 529.

[i] See the note of P. Hardouin, *loco cit.* [k] Supra, *loco cit.*

[l] See the elogium of M. Halley, Acad. des ſciences, ann. 1742, H. pag.

[m] L. 2. p. 145.

ſigns,

ſigns, not eighteen years, but eighteen and an half to the total revolution of the *Saros*; and we know, that in aſtronomy much leſs than ſix months will confound the whole reſult of a period. In fine, Suidas gives the *Saros* only 222 lunar months, and not 223. In vain would we correct this text by that of Pliny. Nothing can lead us to ſurmiſe, that this laſt had in view the *Saros* of the Chaldeans. I am perſuaded, that this period was indeed compoſed of a certain number of lunar months; the name alone indicates it *: but I do not ſee that it is poſſible at this time to determine preciſely what was the number †. We muſt therefore give up the ſearch of the *Saros*, ſince we can never hope to know what was the amount, nor, of conſequence, what the uſe of it. Let us go on to the examination of the other Chaldean periods, that is to ſay, of the *Neros* and of the *Soſos*.

The revolution of the *Neros* was of 600 years [n]. Independent of the authors I have already cited, Joſephus the hiſtorian appears to have been acquainted with this period. Speaking of the long life of the firſt patriarchs, he thus expreſſes himſelf. "Amongſt other views which God had "had," ſays he, "in granting to the firſt patriarchs a "life ſo long as that atteſted by the ſacred books, he de-"ſigned to enable them to perfect geometry and aſtrono-"my which they had invented; for," adds he, "they could "not have foretold with certainty *the motions of the ſtars*, "if they had lived leſs than 600 years, becauſe, in that "ſpace of time, is accompliſhed the *great year* [o]."

Joſephus,

* The name of *Saros*, given to this period, would alone ſuffice to prove that it was compoſed of lunar months. The word *Saros* anſwers exactly to the Chaldean word *Sar*, which ſignifies *menſtruus* or *lunaris*.

† Though we ſhould even grant with M. Halley, that we ought to read in Suidas 223 lunar months, his reaſoning would not be the more juſt. M. le Gentil has, in effect, demonſtrated the total and abſolute imperfection of that period ſo vaunted by M. Halley. Acad. des ſciences, ann. 1756, M. p.

[n] Syncell. p. 17.; Abyden. apud eumd. p. 38. C.

[o] Theſe are the terms in which Joſephus expreſſes himſelf: "Περὶ οὐκ ἀσφαλῶς αὐτοῖς προειπεῖν μὴ ζήσασιν ἑξακοσίους ἐνιαυτούς· Διὰ τοσούτων γὰρ ὁ τέλειος ἐνιαυτὸς πληροῦται. Antiq. l. 3. c. 3. p. 17. "Which things (that is to "ſay, geometry and aſtronomy) they (the patriarchs) could not have predica-

ted

Joſephus, as we ſee, was therefore acquainted with the *great year*, that is to ſay, with an aſtronomical period, which, he ſays, was compoſed of 600 years. Every thing leads us to believe, that it was of the *Neros* of the Chaldeans that Joſephus meant to ſpeak. For I ſee no other people in antiquity amongſt whom ſuch a period was in uſe. Before we apply ourſelves to develope the propriety of this cycle of 600 years, it is proper to examine that of the *Soſos*, becauſe the *Neros* owes its origin to the *Soſos*, as I flatter myſelf with demonſtrating.

The ancients tell us, that the *Soſos* was compoſed of 60 years [p]. That period, the firſt, without contradiction, of which the Chaldeans made uſe, was very imperfect; ſince, after its revolution, it brought back the lunar months only to within a tenth part of a month. They muſt therefore have endeavoured to rectify and perfect it. It was not difficult to find the means. By doubling the *Soſos*, that is, by giving to this period 120 years, inſtead of 60, they had the return of the lunar months to within the twentieth part of a month. By multiplying this cycle as many times as is neceſſary to obtain the preciſe returns of the ſun and moon to the ſame points of the heavens, is formed a period of 600 years, that is to ſay, the *Neros*. This laſt cycle is, in effect, nothing but the product of the *Soſos*, or the period of 60 years multiplied by 10. Thus, we ſee, there did not need much reflection upon the amount and propriety of the *Soſos* to deduce from it the *Neros* *.

The illuſtrious Jean-Dominic Caſſini is, I think, the firſt

" ted with certainty, if they had lived leſs than 600 years; for the *great year* " is accomplished in that ſpace of time." It is eaſy to perceive, that Joſephus does not expreſs himſelf clearly in this paſſage; for though we ſee very well that the verb προειπεῖν, *to foretel*, relates to aſtronomy, which is ſpoke of in the preceding phraſe, as geometry alſo is concerned, that manner of expreſſion preſents an ambiguous and defective ſenſe; and it is to make the meaning of Joſephus be underſtood, that I have added *the motions of the ſtars*, of which we ſhould ſuppoſe he deſigned to ſpeak.

[p] Syncell. p. 17.; Abyden. apud eumd. p 38. C.

* All theſe facts are better cleared up, and exactly demonſtrated in a memoir of M. le Gentil. See Acad. des ſciences, ann. 1756, M. p.

who

who perceived the merit of the *Neros*. It is, in the judgment of that great aſtronomer, one of the fineſt periods that has ever been invented. It reſults from it, that the ſolar years of the Chaldeans were each of 365 days 5 hours 51′ and 36″ [q]. That period alſo diſcovers to us, that the aſtronomers of Chaldea had determined to within a ſecond the duration of the lunar month as exactly as the modern aſtronomers have been able to do it [r]. In effect, 600 years of 365 days 5 hours 51′ and 36″ make 7421 lunar months, conſiſting of 29 days 12 hours 44′ 3″, all but 7 thirds and 18 fourths. We ought therefore to regard the 219146 days, or, what comes to the ſame thing, the 7200 ſolar months, which form the period I ſpeak of, as preciſely equivalent to 7421 lunar months. Now, it is to that ſpace of time that we may fix the epocha of the return of the ſun and moon to the ſame points of the heavens; in a word, the *Neros* of the Chaldeans was in relation to the ſolar and lunar months exactly what the Victorian period is in relation to the *golden number* and *ſolar cycle* [s].

It is not poſſible to determine preciſely the age in which the Chaldean aſtronomers invented and made uſe of the *Neros*. I ſhall content myſelf with only remarking, that this cycle muſt have been known and received in Chaldea ſome time before Beroſus. That hiſtorian, as I have juſt ſaid, made uſe

[q] Anciens mem. de l'acad. des ſcienc. t. 8. p. 5. [r] Id. ibid.

[s] Anc. mem. de l'acad. des ſc. t. 8. p. 5. I am obliged to inform the reader, that it is not to the *Neros* of the Chaldeans that M. Caſſini applies his calculations and the reflections he has juſt read; it is to the *great year* ſpoke of by Joſephus. But as this period appears to me to be the ſame with the *Neros* of the Chaldeans, and to have an evident relation to it, I thought I might apply the reſearches of that great aſtronomer to that period, of which I have already ſaid the invention ſeems due to the Chaldeans, ſince we find none like it amongſt any other people. M. Caſſini, to ſay it by the by, would even have this period of 600 years to have been in uſe in the earlieſt ages. But Joſephus ſays it not; and if he had ſaid it, we ſhould always have had a right to object to his opinion, as being contrary to all appearance of truth. In effect, ſuch an invention ſuppoſes an abundance of knowledge which moſt certainly was not poſſeſſed by the earlieſt ages. What we have ſaid in the firſt and in the ſecond parts of this work, upon the imperfection of aſtronomy in thoſe times, does not, I think, leave the ſlighteſt doubt upon the epocha of that period, which probably was not invented till in the latter ages of the Babyloniun monarchy.

of

of it to form his chronological calculations, and we know that Beroſus wrote in the third age before J. C. [t]. I ſhould therefore think, that this period may have been invented towards the end of the empire of Babylon. This is, moreover, the moſt ancient date that can be aſſigned it [u]. We have ſeen elſewhere how imperfect aſtronomy was in Chaldea till the reign of Nabonaſſar [x].

It now remains, that I ſay a word of the opinion of thoſe writers who have diſputed the amount that I have thought right to aſſign to the *Saros*, the *Soſos*, and the *Neros*. They have pretended, that all theſe different cycles were periods formed of a certain number of days rather than of years. Two Greek monks, one named Annianus, and the other Panodorus, are, I think, the firſt who wanted to give authority to this ſyſtem [y]. They, both of them, wrote about the year 411 of the Chriſtian æra [z]. But one ſimple reflection will convince us, that their ideas, in this reſpect, ſhould have no manner of weight.

In effect, what compariſon can be made between Beroſus, who ſays formally, that the *Saros*, the *Neros*, and the *Soſos* were periods of years, and two unknown Greek monks, who, about 700 years after the age in which that author wrote, would give us to underſtand the contrary, and inſinuate, that all theſe different cycles were compoſed only of a certain number of days. Beroſus, a cotemporary with Alexander, was born and paſſed his life in Chaldea. At hand to draw his knowledge from the original ſources which were ſtill ſubſiſting in his time, he was enabled more than any body to know the amount of the periods he employed. In a word, it was from the ancient monuments of his nation that he compoſed the hiſtory of it; a hiſto-

[t] Tatian. adverſ. Græc. orat. p. 273.; Syncell. p. 16. D.

[u] See Syncell. p. 207. Nabonaſſar reigned about the year 747 before J. C.

[x] See part 1. b. 3. c. 2. art. 2. p. 228. & 229. See alſo part 3. b. 3. c. 2. art. 1. p. 98. & 99.

[y] *Apud* Syncell. p. 34. & 35. See alſo Scaliger, not. in Gr. Euſeb. chron. p. 416 col. B.

[z] See the notes of P. Goar *ad* Syncell. p. 33. col. B.

ry which Pliny, Joſephus, Clemens Alexandrinus, Euſebius, Syncellus, and many others, cite frequently in their writings. Beſides, Beroſus is not the only writer of antiquity who has ſaid, that the periods of which I ſpeak, were periods of years. Euſebius, who was ſo well verſed in the hiſtory of ancient nations, has acknowledged it [a]. Joſephus, as we have already ſeen, teſtifies the ſame fact. We may add to all theſe teſtimonies, that of Suidas. He agrees with all the writers that I have here cited, in ſaying that theſe periods were formed of a certain number of years [b].

The two Greek monks here in queſtion had not the authority of any monument of antiquity for metamorphoſing the periods I ſpeak of into cycles of days. It was, on their part, only pure conjecture. Here is, as I imagine, what might have led them to propoſe ſuch a notion.

Beroſus, in compoſing his hiſtory, had not forgot that he was a Babylonian. We know, that many nations had then the madneſs of wanting to be regarded each as the moſt ancient that was known in the univerſe. Antiquity of date, in the ages I ſpeak of, was regarded as the moſt glorious diſtinction that a people could value themſelves upon. We cannot conceive, to ſay it by the by, how much that fooliſh ambition has been injurious to hiſtorical truth, and what confuſion it has cauſed in the chronology of ancient nations. The Babylonians were of the number of thoſe who would pique themſelves upon the higheſt antiquity. According to them, they had ſubſiſted as a nation 470,000 years [c]. Beroſus, in his hiſtory, was intent upon maintaining and making good that ridiculous pretenſion. To give ſome colour to the enormous calculations he preſented, and render them probable, he pretended to ground them upon the aſtronomical periods here in queſtion. He invented, of conſequence, a ſeries of fabulous kings, whoſe reigns

[a] See Syncell. p. 17. 34 & 35. [b] In Σάρος, t. 3. p. 289.
[c] Diod. l. 2. p. 145. I ſhall ſhew the little foundation for that ridiculous pretention, in the following diſſertation.

filled

filled up the prodigious length of ages which he assigned to the Babylonian empire *.

The Greek monks I have mentioned, were shocked, and with reason, at the monstrous calculations which Berosus presented in his history. Their intention therefore was, to reduce the annals of Babylon to some sort of probability, by converting the periods on which Berosus supported his calculations, into simple periods of days. By this means they thought they could make all agree. They even blamed Eusebius for not having used some such method †. But if these good monks had reflected but a moment on the motive which animated Berosus when he wrote, and upon the end which that impostor proposed, they would easily have discovered, that though his calculations were absurd and monstrous, there was, however, nothing to alter in the amount of the measures of time which he had employed. A proof, that these Chaldean periods were really composed of years and not days, is, that Berosus made use of them. For he would have counteracted his own intention, by discovering the chimera of the Babylonians upon their antiquity, if the *Saros*, the *Neros*, and the *Sosos* had been no more than cycles of days.

* I shall treat of this matter more at length, in the following dissertation.

† *Apud* Syncell. p. 34. & 35.

DISSERTATION III.

On the antiquities of the Babylonians, Egyptians, and Chineſe.

IT was the madneſs of moſt ancient nations, as has been ſhewn in the preceding diſſertation, to pretend to trace their origin to infinity. The Babylonians, the Egyptians, and the Scythians, were thoſe who particularly piqued themſelves upon their high antiquity. By their accounts, they had exiſted as nations for thouſands of ages. The Babylonians boaſted that they had obſerved the courſe of the ſtars 473,000 years [a], and the Egyptians 100,000 [b]. As for the Scythians, they pretended to be more ancient than the Egyptians [c]. In this claſs we may alſo place the Phrygians [d] and the Phœnicians [e]. In a word, each people laboured to heap ages upon ages, and diſplay the antiquity of their origin. But when we come to ſearch into the foundations of thoſe pretended antiquities, we are greatly aſtoniſhed to find, that they reſt upon nothing certain, nor even probable. This is not all; we find that all theſe enormous calculations are of modern enough invention.

In effect, it does not appear, that, till the times of the conqueſts of Alexander, the annals of the Babylonians, or even thoſe of the Egyptians, were traced very high. This is a fact which it is eaſy to prove by the teſtimony of Herodotus, of Cteſias, of Xenophon, of Plato, of Ariſtotle, and, in a word, of all the authors who wrote before the conqueſts of Alexander.

The Babylonians are often mentioned in Herodotus; he had even travelled amongſt theſe people. Yet we find in his writings no traces of that prodigious antiquity which

[a] Diod. l. 2. p. 145.
[b] Auguſtin. de civit. Dei, l. 18. c. 40.
[c] Juſtin. l. 2. c. 1. p. 56.
[d] See Herod. l. 3. n. 2.
[e] Syncell. p. 17. D.

the

the Babylonians are ſaid to have boaſted of by much more recent writers. On the contrary, he gives only 520 years of duration to the Aſſyrian empire, which we know to have been formerly confounded with that of Babylon; and there is no appearance, that Herodotus ſhould have ſpoke otherwiſe in his particular hiſtory of Aſſyria. For we ſee, that no writer has ever reſted upon that work to raiſe higher the origin of the Aſſyrian monarchy.

Cteſias wrote a little time after Herodotus. We know that he had made a long abode in Perſia. That author, who, of all thoſe of antiquity, has aſſigned the longeſt duration to the Aſſyrian empire, does not however make it amount to more than 1400 years [f].

Xenophon, who has had occaſion ſo many times to ſpeak of the Aſſyrians and Babylonians, ſays nothing which can lead us to think, that, in his time, the origin of theſe people was regarded as ſo prodigiouſly ancient. We may draw the ſame inference from the writings of Plato, and from thoſe of Ariſtotle. Both theſe philoſophers ſpeak often of the Aſſyrians and Babylonians; but no mention is made in their writings of thoſe thouſands of ages, whoſe exiſtence and reality I am here examining. As for Ariſtotle, we ſee, that, in general, he was even a good deal inclined to treat as ſo many fables, all that was reported of the hiſtory of Aſſyria and of Babylon [g]. In a word, I repeat it, we find no trace of theſe chimerical antiquities in the authors who preceded the conqueſts of Alexander.

I think I ſhould ſay nearly as much of the Egyptian antiquities. Some authors, as has been juſt ſaid, ſpoke of a duration of 100,000 years. Plato, however, tells us, that, in the time of Solon, thoſe of the Egyptian prieſts who pretended to be the beſt inſtructed in the antiquities of their nation, did not carry back its origin to more than about 9000 years [h]. Herodotus travelled in Egypt about 100 years after Solon. That ſpace of time had been ſuffi-

[f] Diod. l. 2. p. 142.
[g] De rep. l. 5. c. 10. p. 404. E.
[h] In Tim. p. 1044.

cient

cient to give room for vanity and error to make ſome pro-greſs. He, in effect, relates, that, in his time, the prieſts of Thebes gave to the duration of their monarchy 11,340 years [i]. Theſe two calculations, ſuch as Plato and Herodotus preſent them, are certainly of too hard digeſtion. There is ſome error, and we ſhall explain the cauſe of it in a moment. Nevertheleſs, what compariſon can be made between this duration, and that which, according to ſome poſterior writers, the Egyptians boaſted of? It is then proved, by the teſtimony of the higheſt and ſoundeſt antiquity, that it was only in modern times that the Babylonians and Egyptians began to make a parade of thoſe thouſands of ages which I have ſpoke of above. It is now the buſineſs, to indicate the ſource, and mark the epocha of theſe ridiculous pretenſions.

Beroſus on one ſide, and Manetho on another, are inconteſtably the authors, and, if the expreſſion may be allowed, the manufacturers of all theſe marvellous antiquities. It is, in effect, only ſince the publication of their works, that we begin to find, in ancient authors, traces of that exceſſive duration attributed to the monarchy of the Babylonians, and to that of the Egyptians. Beroſus, a Chaldean prieſt, wrote about the year 280 before J. C. a little before the reign of Antiochus Soter [k]. Manetho, an Egyptian prieſt, was cotemporary with Beroſus, ſince he dedicated his hiſtory to Ptolemy Philadelphus [l], who mounted the throne of Egypt the year 284 before the Chriſtian æra. It is probable enough, nevertheleſs, that the work of Manetho did not appear till after that of Beroſus. I ſhould even be greatly inclined to believe, with Syncellus, that Manetho thought of ſtretching out the duration of the Egyptian empire, only in imitation of Beroſus, and not to make his nation appear too modern, in compariſon of the Babylonians [m]. Let us obſerve alſo, that Beroſus and Manetho wrote in Greek; a circumſtance not to be neglected

[i] L. 2. n. 142.
[l] Syncell. p. 26.
[k] Tatian. adverſ. Græc. orat. p. 273.
[m] See ibid.

in

in the queſtion we are upon, as will be ſhown immediately. It remains, to unfold the motives which may have determined theſe two writers to work up that monſtrous chronology, which reſulted from their annals, or rather from the ſimple catalogue of the kings which they ſaid to have occupied the throne of Egypt and Babylon; for, as I ſhall demonſtrate by and by, Beroſus and Manetho produced no other authority to ſupport their chimeras, than a ſimple liſt of kings.

I think, without heſitation, that I may attribute to miſtaken vanity that incredible antiquity from which Manetho and Beroſus would trace the origin of their nation. In the times that theſe two writers compoſed their annals, the Egyptians and Babylonians were alike ſubjected to the dominion of the Greeks. Beroſus and Manetho ſought probably to make themſelves amends, by the pre-eminence of origin, and by the merit of antiquity, for the real advantage which the Greeks had then over the people of Aſia and Egypt. For, as I have already remarked more than once, they were in thoſe days extremely jealous of antiquity of date. Each wanting to give themſelves the preference, it was who ſhould date from the greateſt diſtance. Beroſus and Manetho, by chuſing the Greek rather than their maternal tongue, wanted to enable the Babylonians and Egyptians to reproach their conquerors with the novelty of their origin, by oppoſing thouſands of ages, to the ſmall hiſtorical bounds of theſe inhabitants of Europe [t].

But it muſt be allowed, that the ſtratagem they made uſe of was very groſs, and capable of impoſing only on a people ſo ignorant of antiquity as were the Greeks. Here is the method Beroſus took to aſcribe to his nation a duration of 473,000 years. The aſtronomers of Chaldea had imagined certain cycles to determine the periodical return of the ſtars to the ſame points of the heavens. Theſe cycles, as has been ſhewn in the preceding diſſertation,

[t] See Syncell. p. 16.

took

took in many ages. What did Beroſus? To eſtabliſh the antiquity which he would give to his nation, inſtead of ſaying, that a king had reigned ſo many years, he ſaid, that he had reigned ſo many *ſaros*. It is thus that he made the duration of the ten firſt Babylonian kings amount to 436,000 years [o]. Such calculations ſufficiently expoſe themſelves. Pagan authors themſelves were ſtruck with their want of probability. Diodorus Siculus ſpeaks of it in theſe terms: "We ſhall not eaſily give credit," ſays he, "to what the Chaldeans advance upon the antiquity of "the firſt aſtronomical obſervations; for they ſay, that "they began 473,000 years before the expedition of A-"lexander into Aſia [p]." Let us add to the teſtimony of Diodorus, that of Epigenes, whom Pliny affirms to have been an author of great weight [*]. This Epigenes, who probably wrote under Auguſtus, affirmed, that the aſtronomical obſervations of the Chaldeans did not go higher than 720 years [q]. We ſee then, that the good judges of even profane antiquity had critical knowledge enough to be ſenſible of the impoſture of Beroſus.

That author, however, had endeavoured to ſupport his calculations in the beſt manner he could. In order to give them more credit, he boaſted to have found, at Babylon, records of 150,000 years old [r]. Yet, for all this fine diſcovery, Beroſus was not able to fill up with facts, and a detail of events, the ſpace which he pretended had elapſed from the foundation of the Babylonian monarchy, to the time of Nabonaſſar, who mounted the throne only in the year 747 before J. C. This was enough to render more than ſuſpicious all that Beroſus would raiſe beyond that epocha. Impoſture has its reſources, and does not commonly want evaſions. To extricate himſelf from this plunge, and to juſtify the immenſe void that the hiſtory of Babylon preſented, Beroſus advanced, that Nabonaſſar, infatuated with fooliſh pride, had ſuppreſſed all the hiſtorical monuments of his

[o] Syncell. p. 17. 18. & 30.
[p] L. 2. p. 145.
[*] *Epigenes gravis auctor inprimis*, l. 7. ſect 57. p. 413.
[q] *Apud* Plin. *loco cit.*
[r] Syncell. p. 14. & 28.

nation,

nation, with intention to paſs upon poſterity for the firſt ſovereign of Babylon [r]. It is thus that Beroſus thought to juſtify the chaſms and want of facts with which he might well have been reproached.

Impoſtors are ſubject to betray themſelves.[s] On one hand, Beroſus excuſes the void which is found in his hiſtory, by laying it upon Nabonaſſar's having deſtroyed all the monuments of the kings his predeceſſors; and on another, he affirms, that he had found, at Babylon, records which ran back 150,000 years. One of theſe relations is certainly falſe and forged. Let us rather ſay, that the ſuppreſſion of all the hiſtorical monuments of the Babylonians by Nabonaſſar, is a tale invented by Beroſus, to colour over the impoſſibility he found of filling up, in a ſatisfactory manner, the times anterior to the reign of that prince. But it is dwelling too long upon a chimera, unknown, as I have already ſaid, to the higheſt and ſoundeſt part of antiquity. It appears proved, on the contrary, that the Babylonians were very little ſolicitous about writing their hiſtory. Even their aſtronomical obſervations were very unexact till the reign of Nabonaſſar. It was not till after that monarch, that the Babylonians began to introduce ſome order into their chronology, and to write exactly the date and ſeries of their celeſtial obſervations [t]. Theſe facts appear certain; not only by the teſtimony of ancient hiſtorians, but alſo by that of the moſt celebrated aſtronomers of antiquity. Hipparchus, Timochares, Ariſtyllus, Ptolemy, &c. who had examined with great care the monuments of ancient nations, make mention of no aſtronomical obſervation anterior to the reign of Nabonaſſar [u].

Let us now examine the ſource of the Egyptian antiquities. It is neither purer nor more authentic than that of the Babylonian antiquities. It does not even riſe abſolutely ſo high. Manetho, as I think I have already proved,

[r] *Apud* Syncell. p. 207. [t] See ibid.
[s] See Marſh. p. 474.; Stanley *de* Chald. philoſ. ſect. 1. c. 1. p. 1110.

was inconteſtably the author of it [x]. This Egyptian prieſt, to give ſome colour to his impoſtures, has employed a different artifice from that of Beroſus; but it is not more difficult to diſcover the weakneſs of it.

The Egyptians, like moſt ancient nations, pretended to have been originally governed by the gods. Manetho availed himſelf of that popular opinion to eſtabliſh the antiquities of his nation. According to him, Egypt had been at firſt governed by a great number of gods [y], ſome of whom had reigned more than 1200 years each [z]. Manetho had even made a particular epocha of the reign of Vulcan, the firſt of thoſe gods, who, according to his chronicle, had governed Egypt for 9000 years [a]. It is after this calculation, no doubt, that Diodorus has ſaid, that the Egyptians aſſigned to the reign of the gods a ſpace of 18,000 years [b]. The term is ſtill modeſt; for, according to other chronologers, the Sun, to whom they gave the honour of having firſt governed Egypt, had reigned there 30,000 years [c]. This reign of the gods was, as we perceive, an excellent reſource for lengthening out the duration of the Egyptian empire, as far as they thought proper: for, I have already ſaid, ſome carried it to 100,000 years [d], others to 48,863 [e], ſome to 36,525 [f], and, in a word, to 33,000, to 23,000, to 10,000, &c [g]. It is true, the Egyptian prieſts, to give authority to their lies, advanced, that, ſince the origin of their monarchy, they had obſerved 373 eclipſes of the ſun, and 832 of the moon [h]. But the reflection I made above on the few reſources which Hipparchus, Ptolemy, &c. had found in the aſtronomical records of the Babylonians, ſuffice to deſtroy all theſe falſe allegations. In effect, no obſervations were known in antiquity

[x] *Supra*, p. 270. [y] Syncell. p. 18. [z] Diod. l. 1. p. 32.
[a] Syncell. p. 18. [b] L. 1. p. 53. [c] Syncell. p. 51.
[d] Auguſt. *de* civit. Dei, l. 18. c. 40.
[e] Diog. Laert. in proœm. ſegm. 2.
[f] Syncell. p. 51. C. [g] Diod. l. 1. p. 53. 30. 26. 28.
[h] Diog. Laert. *loco cit.*

more

more ancient than thoſe of the Babylonians [j]. Nevertheleſs, they went no farther back than to about the year 747 before the Chriſtian æra [k].

The ſecond method which Manetho put in practice to lengthen out the duration of the Egyptian monarchy, was a little leſs groſs than that I have juſt ſpoke of. It has been ſhewn, that Egypt, like all the other countries of the univerſe, had been originally divided into many little ſtates [l]. Inſtead of inſtructing us in this fact, and giving us ſeparately, the catalogue of the princes who had reigned at the ſame time over different parts of Egypt, Manetho found it more to his purpoſe, to unite the whole in one and the ſame catalogue. He would, in conſequence, have it believed, that every one of theſe princes had ſucceſſively reigned over all Egypt. It is thus, that this impoſtor contrived to make out that aſtoniſhing liſt of ſucceſſive dynaſties ſpoken of by by ſome authors, who wrote ſince Manetho. But the artifice has been diſcovered a long time, and proved ſo as to admit of no reply [m]. We know, in a word, that Manetho had contrived all this fine chronology only by the example, and in imitation of Beroſus [n].

Let us now ſpeak of the 11,340 years, which, according to Herodotus, the Egyptian prieſts gave to the duration of their monarchy. We ſee, at once, that there is a great difference between this calculation and that given out in Plato; ſince, according to this philoſopher, the Egyptians, in the time of Solon, reckoned only about 9000 years of antiquity, and yet there were but an hundred years be-

[j] Symplicius in lib. 1. Ariſtotel. de cœlo, fol. 27. *recto. in* l. 2. fol. 117. *verſo.*

[k] Marſh. p. 474. [l] Part 1. b. 1. p. 14.

[m] See Marſh. p. 23. 25. & 29.; Pezron, antiq. des tems, c. 13. p. 165.; Newton, chronol. of Egypt, p. 216. 217. & 277.; Lenglet, methode, t. 1. p. 173.; Acad. des inſcript. t. 19. p. 14. 15. 17. 23. 24. 29.

Let us obſerve, that no mention is made of theſe pretended dynaſties in Herodotus, the moſt ancient hiſtorian we have of profane antiquity, and who, beſides, appears ſo well inſtructed in the hiſtory of Egypt. He does not even appear to have known the word *dynaſties*. Neither is it mentioned in Diodorus.

[n] See Syncell. p. 16.

tween Solon and Herodotus. But I have already ſaid it, even this laſt calculation ſtill offends greatly on the ſcore of fidelity and exactneſs. Some very plain reflections will, I think, be ſufficient to demonſtrate the little credit that is to be given to it.

Let us call to mind that conceited opinion which the Egyptians always had of the antiquity of their origin [o], and the affectation with which they made a parade of it [p], above all towards the Greeks [q]. This principle admitted, every thing leads us to believe, that the Egyptian prieſts would omit no occaſion of preſenting to Solon and Herodotus, calculations proper to maintain their ridiculous pretenſion. It was, moreover, very eaſy for them to impoſe in this article. The Greeks, in general, were not diſpoſed to contradict the Egyptians. Beſides, the ancient nations applied themſelves very little to chronological diſcuſſions. Each had formerly a fair ſtage for diſplaying the moſt abſurd fables about their origin.

The ſlighteſt attention, nevertheleſs, would have been ſufficient to have ſhewn Herodotus, that the narration of the Egyptian prieſts deſtroyed itſelf. They reckoned from their firſt king to the time of Sethon 341 generations, 341 kings, and 341 pontiffs [r]. Such a concurrence is not in the order of nature. There did not, therefore, need much judgment to perceive, how much ſuch a fact was contradictory. But I have already ſaid it, the Greeks did not look ſo narrowly, eſpecially in regard to the Egyptians. Furthermore, there is even no appearance that it was originally poſſible to keep an exact account of the firſt reigns, conſidering the little care, and even the little means that the firſt people had to preſerve an exact remembrance of events [s].

I ſhall add, that in regard to the Egyptians in particular, their ancient annals muſt have been in great diſorder.

[o] See Herod. l. 2. n. 2.
[p] See Iſaiah, c. 19. v. 11.
[q] See Plato in Tim. p. 1043. & 1044.
[r] Herod. l. 2. n. 142.
[s] See what I have ſaid upon this ſubject in the chapter where I treat of the origin of writing. Part 1. b. 2. c. 6.

Hiſtory

hiſtory does not permit us to doubt it. We ſee, that when Cambyſes, the ſon of Cyrus, became maſter of Egypt, he perſecuted the prieſts, that is, the learned of the country, and ſet fire to the temples [t]. It was, we know, in theſe temples that the Egyptians preſerved their annals, the cuſtody of which was intruſted to the prieſts [u]. It may be judged, what degree of certainty the hiſtory of Egypt may have obtained ſince that event. Artaxerxes Ochus gave it afterwards a ſtroke at leaſt as fatal. This prince cauſed all the copies of the ſacred archives to be tranſported into Perſia [x]. Bagoas, one of his eunuchs, ſome time after, ſay they, obtained for the prieſts a permiſſion to ranſom them. But this laſt fact appears to me ſuſpicious. It may very well have been invented only to given ſome appearance of truth to the Egyptian antiquities, by making it believed, that they reſted upon authentic monuments, ſuch as the ſacred archives, which contained the whole hiſtory of the nation. However that may be, ſuppoſing even that theſe ancient depoſits were reſtored to the Egyptians, we are ſenſible that they could not be in a good condition. It is probable, that thoſe who carried them off, would not take all the precautions neceſſary to prevent theſe manuſcripts from ſuffering by their tranſportation into Perſia, and they muſt alſo have been impaired in bringing back from Perſia into Egypt. All theſe voyages muſt infallibly have ſpoiled and conſiderably damaged the ancient regiſters.

Upon the whole, and this is a reflection to which I do not ſee that any thing ſolid can be oppoſed, if the Egyptians and Babylonians had preſerved records as preciſe and as exact as they would perſuade us, why does there reign ſo much confuſion and uncertainty in their chronology? why do the calculations preſented by writers of antiquity, differ from each other ſo exceſſively as we have ſeen? why, in a word,

[t] Herod. l. 3. n. 29. & 37.; Diod. l. 1. p. 55.; Plin. l. 36. ſect. 14. p. 735.; Strab. l. 17. p. 1170. C.

[u] Plato, p. 1243.; Diod. l. 1. p. 84. l. 16. p. 122.; Syncell. p. 40. B.

[x] Diod. l. 16. p. 122.

do

do the annals of Babylon and of Egypt afford, for ſo many ages, only ſimple catalogues of kings without relating the leaſt fact or ſmalleſt event? But, will they ſay, the moſt of theſe kings were indolent princes, whoſe actions did not deſerve to be tranſmitted to poſterity. Be it ſo; but under theſe ſame idle kings, there muſt neceſſarily have happened ſome events, eſpecially during ſo long a ſeries of ages as that here in queſtion. Whence comes the profound ſilence in this reſpect, that is remarked in the hiſtories of Egypt and Babylon, hiſtories, which, nevertheleſs, recite the names of all theſe ſovereigns, and even the preciſe duration of their reigns? Was it not incomparably more eaſy to retain the memory of the principal events which happened in theſe reigns, than the names of ſo many ſovereigns, and above all, than the number of yeârs that they were ſaid to have occupied the throne. A compariſon will place this objection in its full light.

The laſt kings of the Merovingian race, for example, are reproached with having paſſed their lives in ſhameful idleneſs, which has even given them the name of the *Slothful Kings*. The detail of their actions is now entirely unknown to us. Even the preciſe duration of many of their reigns, ſuffers many difficulties. Nevertheleſs, we are not ignorant of the principal events which then happened in France. It is true, we loſe ſight of the monarchs, but we ſee the actions of their mayors of the palace. In a word, the hiſtory of France furniſhes, in theſe obſcure reigns, the detail of many events; ſuch, for inſtance, as battles, foundations of monaſteries, diſſenſions, commotions, ſtatutes, &c. It was not the ſame with the Egyptian and Babylonian chronicles. In them were found the names of a number of kings, and the preciſe duration of their reigns; but beyond that, no detail, no mention of any event fallen out in thoſe times in Egypt, or at Babylon. This ſingle reflection ſuffices, I think, to unmaſk the impoſture of Beroſus and Manetho. It is not difficult to forge at random a liſt of kings, and to aſſign at pleaſure any duration to their reigns; but it is not ſo eaſy to arrange

ſinge an uninterrupted ſeries of events relating to each other, connected in fine, and continued for thouſands of ages. Accordingly we ſee, that the ſound judges of antiquity were the firſt to turn into ridicule theſe fabulous chronicles which preſented no fact, nor any event.

Cicero expreſſes his ſenſe of them in the moſt formal terms [y]. Diodorus gave no faith to them [z]. Ariſtotle, by what appears, was far from being convinced of that high antiquity which the Egyptians were fond of boaſting [a]. Plutarch formally combats it [b]. Varro, one of the moſt learned men who perhaps ever appeared, makes the origin of this people go no higher back than to a little more than 2000 years before the times in which he wrote [c]; that is to ſay, to about the year 2120 before the Chriſtian æra. Herodotus himſelf does not ſeem to have given much credit to the 11,340 years which were mentioned to him by the prieſts of Egypt. I judge ſo by the manner in which he treats the ſucceſſors of Menes, who, he ſays, was the firſt ſovereign of Egypt. He paſſes over a ſeries of kings to the number of 330, declaring, that he does not dwell upon them [d]. Herodotus undoubtedly regarded that liſt as apocryphal and forged, the rather as, by the confeſſion of the Egyptian prieſts themſelves, no event of which it was poſſible to ſay any thing, could be found in the whole duration of the reigns of theſe pretended kings [e]. Diodorus has done much the ſame thing. Of 470 kings and five queens which in the annals are ſaid to have occupied the throne ſucceſſively [f],

[y] *Contemnamus etiam Babylonios. . . . . Condemnemus inquam hos, aut ſtultitiæ, aut vanitatis, aut imprudentiæ, qui CCCCLXX. millia annorum, ut ipſi dicunt, monumentis comprehenſa contineant, et mentiri judicemus, nec ſeculorum reliquorum judicium, quod de ipſis futurum ſit pertimeſcere.* De divin. l. 1. n. 109.

[z] L. 1. p. 30. l. 2. p. 145.

[a] Metereolog. l. 1. c. 14. p. 547. D.

[b] *In* Numa, p. 72. B.

[c] *Apud* Auguſtin. *de* civit. Dei, l. 18. c. 40. See alſo A. Gell. l. 14. c. 1. p. 633.

[d] L. 2. n. 100. 101. & 102.

[e] Ibid. n. 101.

[f] L. 1. p. 53.

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he ſpeaks only of fifteen or ſixteen. In a word, I repeat it, we ſee very clearly, that neither Herodotus nor Diodorus were able to extract from the Egyptian annals, a ſeries of facts barely capable of filling up the ſpace of time which is known to have elapſed from the deluge, to the deſtruction of the ancient Egyptian empire by Cambyſes [a]. This reflection falls ſtill more ſtrongly upon the antiquities of the Babylonians. We perceive in their hiſtory many chaſms, and a void ſtill more immenſe. There even remains no monument of this people; whereas the obeliſks, the pyramids, and the ruins of many other grand edifices, atteſt at this day that the Egyptians once ſubſiſted in ſplendor.

For the reſt, I have ſeen ſome perſons pretend, that the conſtruction of the monuments I have juſt ſpoke of, neceſſarily ſuppoſes, that the Egyptian monarchy muſt have ſubſiſted during a very great number of ages. I own I am very far from being of ſuch an opinion. Thouſands of ages were not neceſſary to accompliſh the raiſing theſe monuments much too greatly boaſted of. I think a ſimple reflection will make this clear.

The Incas, that is to ſay, the firſt ſovereigns of Peru, had conſtructed many works, ſeveral of which are equal, if they do not even ſurpaſs the moſt famous Egyptian monuments. In the number of theſe I ſhall place the two roads which lead from Cuſco to Quito; one of them carried on through the rocks and precipices of the mountains of Cordiliere; and the other along the ſea-coaſt upon a quickſand for near 500 leagues of country: the temple of the ſun, the citadel and the palace of Cuſco, another royal houſe, the ruins of which are ſtill to be ſeen near to Cannar [b]; the ancient temple of Cayambe [c], a great number of canals amongſt which there was one twelve feet deep, and more

[a] See the chronology of Newton.

[b] See Garcilaſſo de la Vega, hiſt. des Incas, l. 9. c. 13. l. 3. c. 20. 21. &c.; Voyage de Coreal, t. 1. p. 364. & 365.; Acoſta, hiſt. des Ind. Occident. l. 6. c. 14.; Hiſt. gen. des voyages, t. 13. p. 571. & 579.; Hiſt. des Incas, t. 1. p. 264. 265. 292. 293.

[c] Journ. des ſcav. Juin. 1757. p. 351.

than

than 120 leagues in length, &c [k]. For the greatneſs of the labour, for the difficulty, and for the expenſe, we may very well compare theſe monuments to the obeliſks, the pyramids, the temples, and the palaces of Egypt. The monarchy founded by the Incas ſubſiſted however only about 350 years under thirteen kings [l]. I might alſo ſpeak of the ſovereigns of Mexico, who in like manner executed ſurpriſing works [m], and whoſe empire nevertheleſs did not ſubſiſt ſo long as that of the Incas.

The monuments raiſed by the firſt inhabitants of Egypt, can therefore in no manner ſerve to prove the antiquity of that people. They can be the leſs adduced for that purpoſe, as, according to all appearances, they were executed in a very ſhort time. Egypt was formerly extremely populous. This is a fact which cannot be called in queſtion. All the writers of antiquity agree in atteſting it [n]. It was even by means of that immenſe multitude of inhabitants, that, according to their teſtimony, the ancient monarchs of Egypt accompliſhed the raiſing the quantity of monuments which have rendered that empire ſo famous [o]. From this reflection, we become eaſily ſenſible, that the Egyptians may have finiſhed their moſt famous enterpriſes in a very few years. They employed to the number of 300,000 men at a time to execute a work [p]. Such was in general the taſte of all the ancient nations: they were impatient to accompliſh their wiſhes. Beroſus ſays, that the ſuperb palace of Babylon had been built in fifteen days [q]. The Chineſe employed only five years to perfect their great wall [r]. We might cite

[k] Voyage de D. Ant. d'Ulloa, t. 1. p. 422.; Hiſt. des Incas, t. 1. p. 166. & 167.

[l] Acoſta hiſt. nat. des Ind. l. 6. c. 19. fol. 300. *verſo*.

[m] Hiſt. gen. des voyages, t. 12. p. 430. *&c.* Gemolli, t. 6. l. 2. c. 8.

[n] See les mem. de Trev. Janv. 1752, p. 32. &c.

[o] Diod. l. 1. p. 36. & 37.

[p] See Herod. l. 2. n. 124.; Diod. l. 1. p. 73.; Plin. l. 36. ſect. 14. & 17.

[q] Apud Joſ. antiq. l. 10. c. 11. ſub fin. This fact without doubt is exaggerated; but however it proves the conſtant practice in Aſia of employing very little time in the conſtruction of the moſt immenſe works.

[r] Martini, hiſt. de la Chine, l. 6. t. 2. p. 40. & 41.

many other examples of immenſe enterpriſes executed in a very little time by the Orientals[r]. It muſt certainly have been the ſame amongſt the Egyptians. Thus their obeliſks, their pyramids, their palaces, their temples, &c. can by no means authoriſe the conjectures that are attempted to be drawn from theſe monuments to eſtabliſh the antiquity of the Egyptian empire. All theſe allegations fall of themſelves. The facts which the reader has juſt ſeen, deſtroy them abſolutely.

It even appears to me demonſtrated, that the Egyptians had not much more knowledge of architecture, of ſculpture, and of the fine arts in general, than the Peruvians and the Mexicans. For example, neither one nor the other knew the ſecret of building of vaults[s]. What remains of foundery or ſculpture, is equally clumſy and incorrect. I think this obſervation abſolutely eſſential. This ſort of ſkill in reality cannot be acquired but by length of time. The Egyptian monarchy, though much more ancient, and though it continued for many more ages than that of the Peruvians and of the Mexicans, yet did not ſubſiſt long enough for theſe people to acquire the lights and the ſkill which they have always failed of in many branches of the arts. The Egyptians, as well as the Peruvians and Mexicans, were even deſtitute of certain arts, to which their ſeeming meanneſs, and more our habitual uſe of them prevent us from giving attention; but the invention of which has done more honour to human genius, than all the prodigious monuments I have ſpoke of.

It were ſtill vain to attempt to eſtabliſh the pretended antiquity of the Egyptians upon the progreſs that theſe people had made in the demonſtrative ſciences. Their knowledge in this reſpect was very imperfect. The reader may recollect the details I entered into upon this ſubject in

[r] See L'hiſt. gen. des Huns par M. de Guignes, t. 4. p. 208. & 209.

[s] See part 3. book 2 c. 2. p 59. & 60.: Acoſta *loco cit.* fol. 292. *verſo.*; Hiſt. gen. des voyages, t. 13. p. 580.; Garcilaſſo de la Vega, l. 7. c. 11. t. 2. p. 192.; Hiſt. des Incas, t. 1. p. 167.; Mem. de l'acad. de Berlin, t. 2 ann. 1746, p. 448. 451. 452.

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the article of ſciences[u]. One ſingle example is enough to ſhew the little extent of their diſcoveries. In the time of Herodotus, that is to ſay, about the year 450 before the Chriſtian æra, the Egyptian aſtronomers did not yet know, that the length of the ſolar year is more than 365 days [x]. We may judge by this fact, which is very certain and well proved, of the progreſs which the ancient inhabitants of Egypt had made in the demonſtrative ſciences. In a word, and this is a reflection that cannot be too much inſiſted upon, near 500 years before J. C. Democritus and many other philoſophers, who maintained, that the world had had a beginning, applied themſelves to prove the newneſs of it by all the means that hiſtory and critical knowledge could furniſh; yet we do not ſee, that it was ever undertaken to refute them ſolidly [y], although nothing would have been eaſier if the pretended antiquities of the Babylonians and Egyptians had had any reaſonable foundations.

Let us finiſh by a glance upon the antiquities of the Scythians. They will employ us but a moment. Theſe people, according to Trogus Pompeius, and of Juſtin his abridger, were acknowledged to be of more ancient origin than the Egyptians [z]. The Scythians, however, in the time of Herodotus reckoned only one thouſand years of antiquity [a].

We may moreover apply with great juſtice the reflections I have here made upon the antiquities of the Babylonians and Egyptians to thoſe of the Chineſe. According to the popular ideas of the Chineſe, the origin of that nation would aſcend to thouſands of ages. I ſay according to the popular ideas, becauſe the learned of China are the firſt to deride and give up that fabulous antiquity [b]. That pretenſion is not even very ancient in China. It aroſe in pretty

[u] Part 2. book 3. c. 2. part 3. book 3. c. 2. art. 2.
[x] See *ſupra*, book 3. c. 2. p. 101. 102.
[y] See Jaquelot, diſſert. ſur l'exiſtence de Dieu, t. 1. p. 265. &c.
[z] L. 2. c. 1. p. 60. [a] L. 4. n. 5. 7.
[b] Martini, hiſt. de la Chine, t. 1. p. 7.; Lettr. édif. t. 21. p. 119. 120; Hiſt. des Huns par M. de Guigues, t. 1. part 1. p. 2. & 3.

modern times [c]; another conformity with the Egyptian and Babylonian antiquities, unknown, as I have made it appear, to the moſt ancient and moſt learned writers of Greece and Rome. Beſides, what dependence can we have upon the certainty of the Chineſe chronology for the early times, when we ſee theſe people unanimouſly own, that one of their greateſt monarchs intereſted in the deſtruction of the ancient traditions, and of thoſe who preſerved the memory of them, cauſed all the books which did not treat of agriculture, or of medicine, or of divination, to be burnt, and applied himſelf for many years to deſtroy whatever could recall the knowledge of the times anterior to his reign *. About forty years after his death, they wanted to re-eſtabliſh the hiſtorical monuments. For that purpoſe they gathered together, ſay they, the hearſays of old men. They diſcovered, it is added, ſome fragments of books which had eſcaped the general conflagration. They joined theſe various ſcraps together as they could, and mainly endeavoured to compoſe of them a regular hiſtory. It was not however till more than 150 years after the deſtruction of all the monuments, that is to ſay, the year 37 before J. C. that a complete body of the ancient hiſtory appeared. The author himſelf who compoſed it, Sſe-Ma-tſiene, had the candour to own, that he had not found it poſſible to aſcend with certainty 600 years beyond the times in which he wrote.

Such is the unanimous confeſſion of the Chineſe [d]. I

[c] See l'hiſtoire abrégée de l'aſtronomie Chinoiſe par le P. Gaubil, dans les obſervations mathem. du P. Souciet, t. 2. p. 16. 17. & l'hiſt. des Huns par M. de Guignes, t. 1. part 1. p. 2.

* This event happened 213 years before the Chriſtian æra, by the order of Chi-Hoam-ti. This monarch, excepting his averſion to letters, was a very great prince. His abilities and firmneſs were equal, and he ſucceeded in the execution of his project of ſuppreſſing all hiſtorical books. That deſtruction was by ſo much the more complete, as the uſe of paper was not known at that time. They drew characters upon tablets or upon little plates of bamboo, which rendered the ſmalleſt writing of conſiderable bulk, and, of conſequence, very difficult to conceal. Acad. des inſcript. t. 10. p. 381. t. 15. p. 529.; Relat. du royaume de Siam par la Loubere, t. 2. p. 376. & 377.

[d] Acad. des inſcript. t. 10. p. 381. 382. 383. 388. t. 15. p. 506. 528. 529. 532. 543. 552. & 561.

leave

leave to be judged, after ſuch a fact, the certainty of their ancient hiſtory *. Accordingly we find, in treating of it, unſurmountable difficulties and contradictions. The variations that are remarked in the principal epochas [e], prove, that the hiſtory of the Chineſe has no ſuperiority nor any advantage over other profane hiſtories. There runs through it an uncertainty like that which the chronologiſts find in their reſearches into the hiſtory of the Babylonians, the Egyptians, and in that of the firſt kings of Greece. Beſides, it is equally deſtitute of facts, circumſtances, and details.

As to the aſtronomical obſervations on which it has been attempted to eſtabliſh the pretended antiquity of the Chineſe, it is long ſince the celebrated Caſſini [f], and many other writers of merit [g], have ſaid enough of them to diſcredit all that apparatus viſibly inſerted after date. The forgery is even ſo plain, that it has been perceived by ſome of the

* The only monuments upon which the ancient hiſtory of the Chineſe can be eſtabliſhed, are, 1. Some fragments of the moral works of Confucius, and a very dry and ſhort chronicle of the hiſtory of his province. That chronicle aſcends only to the year 722 before J. C. Confucius lived about the year 450 before the Chriſtian æra. Acad. des inſcript. t. 10. p. 382. t. 15. p. 540. 2. A moral work of the philoſopher *Meng-tze* who lived about the year 320 before J. C. Ibid. t. 18. p. 206. & 207. 3. The *Tſchon-chou*, a very ſummary chronicle, compoſed about the year 299 before J. C. and found about the year 264 of the Chriſtian æra. Ibid. t. 15. p. 537. t. 18. M. p. 215. 218. & 228. 4. The body of hiſtory compoſed by *Sſe-ma tſiene*, and publiſhed the year 37 before J. C. Ibid. t. 15. p. 543. Sſe-ma tſiene is looked upon as the father of hiſtory amongſt the Chineſe. A collection of the facts compriſed in all theſe monuments, would ſcarce make a little volume in 12° of ordinary print. All the other Chineſe writers are greatly poſterior to thoſe I have named. Yet it is very certain, that they have had no other helps, and that no other ancient monument has been yet diſcovered. Acad. des inſcript. t. 18. M. p. 194.

[e] See Hiſt. gen. des Huns par M. de Guignes, t. 1. p. 5. 6. 10. 14. &c.; Acad. des inſcript. t. 10. p. 381. 388. 393. &c; Journ. des ſcav. Decembre 1757, p. 817. & 818.

[f] Anc. mém. de l'acad. des ſcienc. t. 8. p. 284. 303. 307.

[g] Jaquelot, diſſert. ſur l'exiſtence de Dieu, t. 2. p. 97. 102. & 103.; Ancien. relat. des Ind. & de la Chine, p. 350. 354. 358.; Spectacle de la nature, t. 8. p. 37.; M. Freret, dans les mem. de l'acad. des inſcript. t. 10. p. 393. 394. 395. 396. t. 18. p. 198. 210. 221. 280. It is true, that in the ſequel M. Freret ſeems to give up that notion; but I own, that the reaſons which appear to have convinced him, perſuade me not at all. See t. 18. p. 242. & 247. &c.

literati

literati [h], notwithſtanding the little notion which the Chineſe in general have of critical knowledge. We may affirm boldly, that till the year 206 before J. C. their hiſtory deſerves no faith [i]. It is a continued jumble of fables and contradictions [k], a monſtrous chaos from which nothing coherent and reaſonable can be extracted.

What we know of the origin of the greateſt part of the arts and ſciences, would alone ſuffice to demonſtrate the falſity and the ridicule of all the fabulous antiquities I have here ſpoke of. We ſee very clearly the moſt eſſential diſcoveries, the moſt neceſſary arts take riſe or introduce themſelves ſucceſſively in the different parts of the univerſe. We can even trace their progreſs to a certain point, and diſcover enough of it to be convinced, that our whole knowledge is not very ancient. The newneſs of arts and ſciences is a ſenſible proof of the little antiquity of the world. We ſhould not at this day have the leaſt trace, the ſmalleſt veſtige of their origin, if it was as diſtant from us as the pretended chronicles of certain nations would make us believe. Nevertheleſs the reader may have remarked, that we are by no means deſtitute of lights and information upon all theſe objects. This reflection is by ſo much the more ſtrong, and proves ſo much the better the little antiquity of the world, as the tradition of the earlieſt events could only be preſerved by the memory. It is a proof, moreover, the force of which has been felt by ſuch of the ancient philoſophers as are the leaſt to be ſuſpected of credulity. The newneſs of arts and ſciences has always been the principal argument they made uſe of to maintain that of the world [l].

We may draw a proof equally invincible from the imperfection of many of the arts in the ancient world, and

[h] Acad. des Inſcript. t. 10. p. 396. t. 18. M. p. 220. 221. 239.
[i] Acad. des inſcript. t. 10. p. 380. 381. 388.
[k] Jaquelot, *loco cit.* p. 98. &c.; Spectacle de la nat. t. 8. p. 35. & 36.
[l] See Lucret. l. 5. v. 331. &c.; Macrob. in ſomn. Scipion. l. 2. c. 10. p. 153. See alſo Jaquelot, diſſ. ſur l'exiſtence de Dieu, t. 1. c. 22.

of

of all the ſciences which depend upon length of time and experience. I might ſpeak alſo of the abſolute ignorance of even the moſt civilized of the ancient nations, touching a great number of moſt uſeful and moſt important diſcoveries that we enjoy at this time. But I think I have ſaid enough upon all theſe objects in the courſe of my work, to be diſpenſed with inſiſting upon them any longer.

DISSERTATION IV.

Examination of a paſſage of Diodorus, taken from the ſecond book of that hiſtorian, N° 142.

THE fact which we are about to examine in this diſſertation, has an intimate relation with the antiquities of the Egyptians, on which we were employed in the preceding one. For this reaſon, and that I might leave nothing to wiſh for upon that ſubject, I have thought proper to give a particular attention to it. The reader will eaſily perceive, that, apart from ſuch a conſideration, the paſſage of itſelf would not deſerve the ſmalleſt reflection.

The paſſage in which Herodotus has tranſmitted to us the tradition of the fact intended for the ſubject of this diſſertation, has given a great deal of trouble to modern critics, without any of them having accompliſhed the clearing it up in a ſatisfactory manner. We do not flatter ourſelves with better ſucceſs. On the contrary, the few reflections we are about to propoſe, tend only to ſhew, that it is morally impoſſible to make out a reaſonable meaning from the expreſſions of Herodotus in this paſſage.

The text in queſtion has been hitherto very ill rendered in all the tranſlations commonly made uſe of; for which reaſon, we have thought fit to begin by giving a literal and faithful verſion of it.

" They (the Egyptian prieſts) ſaid, that during this time " (the time in queſtion was 11,340 years, which, according " to the fabulous tradition of the Egyptians, had elapſed " from the origin of the Egyptian monarchy to the reign of Serhon), the Egyptian prieſts then ſaid, that, during " that interval of time, the ſun had riſen four times where " he is accuſtomed commonly to ſet; to wit, that twice " that

" that ſtar had riſen where he now ſets, and twice had ſet " where he now riſes; but that this had occaſioned nothing " extraordinary in Egypt, either in regard to the pro- " ductions of the earth, or in regard to the overflowings " of the Nile, or in regard to diſtempers, or in regard to " mortality." Such is the literal tranſlation of the paſſage we are to diſcuſs. We have abſolutely neglected ſtyle and elegance, leſt we ſhould have failed in point of fidelity.

There are, I believe, few perſons who do not, at the firſt glance, perceive ſomething ambiguous in this narration of Herodotus. The moſt natural ſenſe that can be given to the words of this hiſtorian, is, that, during the 11,340 years in queſtion, the diurnal motion of the ſun had changed at two different times, and had afterwards, at two different times, returned to be the ſame that it was before the firſt of theſe two variations which I ſuppoſe; inſomuch that, in the courſe of the 11,340 years in queſtion, they had ſeen, during four different parts of that period, the ſun move one way, and during two other parts move the contrary way, and that alternately.

Here is in what preciſely conſiſts the great difficulty of the paſſage that we examine. If Herodotus had ſaid, that, during the courſe of the 11,340 years in queſtion, the ſun had riſen three times where he is accuſtomed to riſe, and that twice that ſtar had riſen where he now ſets, the fact had been certainly very extraordinary, yet it would not have been abſolutely inconceiveable. But that two changes of ſtate, which bring preciſely only two returns to the primitive poſition, ſhould, by their combination with the primordial ſtate, furniſh during any time whatever four alternatives of that primordial ſtate, this implies contradiction. A very ſimple example will make this be perceived with the utmoſt evidence.

Let us obſerve a tree for two ſucceeding years. If the obſervation begins in ſummer, we ſhall ſee this tree thrice clothed with leaves, and twice ſtripped of them during that ſpace of time; and that alternately. If the obſervation

begins in winter, we ſhall ſee, on the contrary, this ſame tree ſtripped of its leaves at three different times, and it will be ſeen clothed with leaves, during only two of the five alternatives it undergoes, in the courſe of the two years in queſtion; being ſtripped of its leaves, will be the primordial ſtate of that tree in the ſecond caſe. It will be the contrary in the firſt. But in one and the other caſe, two changes of condition operate only three alternatives in the primordial ſtate. It is conſequently abſurd and contradictory, that two changes of the direction of the diurnal motion of the ſun, during any period whatever, ſhould ever operate four alternatives of the ſtate in which that direction was, when the period in queſtion began.

It is this abſurdity, without doubt, which has led the common interpreters of Herodotus, to tranſlate the paſſage we diſcuſs in a manner entirely different from ours. They make Herodotus ſay, "that, during the courſe of 11,340 "years which had, they ſaid, preceded the reign of Sethon, "the ſun had riſen four times in an extraordinary manner, "to wit, that twice he had riſen where he now ſets, and "twice he had ſet where he is now accuſtomed to riſe."

But in avoiding one rock, have not theſe interpreters ſplit upon another, at leaſt as dangerous as that they wanted to ſhun, by putting Herodotus in contradiction with himſelf in the ſame phraſe? According to them, that hiſtorian ſays at firſt, that, during the 11,340 years he ſpeaks of, the ſun had riſen four times in an extraordinary manner; and then immediately they make Herodotus ſay, that during this ſame time the ſun had riſen twice where he commonly ſets, and ſet twice where he is accuſtomed to riſe; that is to ſay, that twice only the ſun had riſen and ſet in an extraordinary manner. Was there ever a more palpable contradiction?

Independently of the two explications which we have juſt examined, which are both at the bottom alike contradictory and abſurd, only with this difference, nevertheleſs, that in one of them the contradiction is leſs ſtriking than

than in the other, ſome commentators propoſed a third interpretation of it.

If we may believe theſe new critics, Herodotus has ſaid, not that the ſun had riſen four times in an extraordinary manner, during the period in queſtion, but that the courſe of this ſtar had undergone four changes; to wit, two in his riſing, and two in his ſetting. This explication, as we ſee, is not much more ſatisfactory than all thoſe I have juſt given an account of. When the ſun riſes where he commonly ſets, it is neceſſary that he ſet where he is accuſtomed to riſe, as we have already made it be obſerved more than once; of conſequence, two changes in the riſing of the ſun, and two changes in his ſetting, will never make more than two, and not four changes in his diurnal motion. Beſides, this ſenſe is abſolutely contrary to the text of Herodotus, who makes uſe of a term, which cannot exactly ſignify any other thing than the riſing of the ſun *; and never the motion or the courſe of that ſtar.

From all theſe reflections we ought to conclude neceſſarily, that the paſſage in queſtion, taking it according to Herodotus's own expreſſions, is ſuſceptible of no reaſonable explication. Yet I think I diſcover in it a glimpſe of an ancient tradition upon an extraordinary event, which well deſerves our attention to diſcuſs it. It is ſolely upon this object that we ſhall employ our reflections.

Whatever fine genius Herodotus had received from nature, and however extenſive was his knowledge in many reſpects, we may very eaſily convince ourſelves that he was very weak on the ſide of aſtronomy. When he relates, for example, that maritime expedition which the Phœnicians undertook, by order of Nechos King of Egypt, round Africa, ſetting out by the ports of the Red ſea, and returning again by the Mediterranean, he cannot perſuade himſelf, that theſe travellers had, as they reported, ſeen the ſun upon their right hand †; that is to ſay, that they had ſeen him

* Ἀνατείλαι.

† Book 4. n. 42.

reach, and even paſs their zenith, and be ſucceſſively on each ſide of their firſt vertical point *. Yet this fact has nothing aſtoniſhing for any one who has the leaſt tincture of coſmography.

It were not difficult to find other proofs of the little knowledge that Herodotus had of aſtronomy [b]. What we have juſt ſaid, is enough to ſhew, that it is no wonder that this hiſtorian ſhould have advanced an aſtronomical paradox. We may even add, that the Egyptian prieſts, from whom Herodotus ſays he received the fact he relates, had no doubt imparted it in their uſual manner, that is, greatly wrapped up, and abſolutely enigmatical. Herodotus, in relating it, will have completed its obſcurity, by not comprehending the language of the Egyptian prieſts.

If we might conſider in this ſenſe the paſſage we examine, it were eaſy to get rid of the perplexity, by ſaying, that Herodotus intending to ſpeak of a matter which he underſtood not, and which it was even difficult that he ſhould underſtand, it would be in vain for us to endeavour at this day to come at his meaning even from himſelf. But this paſſage, ſuch as it has come to us, is not leſs ſhocking to good ſenſe than to aſtronomy, as we have ſhewn above. Herodotus, though little verſed in that ſcience, was not the leſs a genius of the firſt order, and poſſeſſed of as much judgment as any writer of all antiquity; it would therefore, in our opinion, be doing outrage to his memory to

* To underſtand this paſſage, we muſt know, that the ancients, to determine the poſition of the four cardinal points, with reſpect to any ſpectator, ſuppoſed him turned towards the weſt. Standing in that manner, he had the north to his right, and the ſouth to his left. We may ſee in the firſt book of the Meteors of Cleomedes, p. 13. upon what that ſuppoſition is founded. From that cuſtom it is eaſy to ſee, that thoſe who inhabit the northern part of the torrid zone have the ſun on the right, that is, to the north, during all the time which that ſtar employs in running through the northern ſigns. Thoſe, on the contrary, who are in the ſouthern part, have the ſun on their left, that is, to the ſouth only, when his meridional declination exceeds the latitude of their habitation.

[b] See l. 1. n. 32. the monſtrous calculation of intercalary months which that author makes Solon make. See alſo *ſupra*, book 3. chap. 2. art. 2. p. 100. & 101.

look

look upon this paſſage as ſubſiſting at this day, ſuch as it came from the hands of its author. There is all appearance, on the contrary, that the text is conſiderably altered in that place, as in an infinity of others, where the errors of tranſcribers were, however, much leſs to be feared. No body, I believe, is ignorant that there are few ancient authors whoſe text has ſuffered ſo much from the injuries of time and the errors of tranſcribers, as that of Herodotus. It were neceſſary, of conſequence, before we undertake to explain the paſſage in queſtion, in a ſatisfactory manner, to reſtore it by the authority of ſome manuſcript, ſuch as perhaps is not to be found.

For want of ſuch a help, the modern critics have abandoned themſelves to abundant conjectures, which, for the moſt part, appear at firſt ſight weak, and even often ridiculous. We have therefore thought them unworthy of notice.

One there is, however, which being truly ingenious, deſerves, for that reaſon, a particular attention, though, to ſay the truth, it has no more ſolidity than the other conjectures by which the paſſage in queſtion has been attempted to be explained. A modern author, who has juſtly obtained the moſt brilliant reputation, by an union of various talents rarely to be found in one and the ſame perſon, has placed this laſt conjecture in all its light. We rather chuſe to refer thoſe who would be acquainted with this ſyſtem to what he ſays of it, than to give a detail which would never have the elegance and amenity which that ingenious writer has diffuſed over all the ſubjects he has undertaken to handle. The reader will find in his work all that can be ſaid in favour of that opinion, and even ſome of the reaſons which may render it problematical [e].

For what remains, if the tradition of a change in the motion of the ſun was related only by Herodotus, I think that the critics would have given leſs attention to the paſ-

[e] Elements of Newton's philoſophy made eaſy to all the world by M. de Voltaire.

ſage

ſage of that author; but we find this ſame tradition in many other writers, always indeed in a very confuſed manner.

Plato relates in one of his dialogues, that, in the time of Atreus, the motion of the firmament had changed, in ſuch a manner that the ſun and all the ſtars had begun to riſe where formerly they had ſet, and to ſet where they had been accuſtomed to riſe; in a word, the machine of the world was moved in a way contrary to that in which it had been before. He accompanies this relation with ſo odd a detail of the effects of this change, and with ſuch ſingular phyſical explications, that it is eaſy to ſee he ſpoke only from a tradition extremely confuſed and perplexed [d]. We judge alſo from a paſſage in his Timæus, where, in two words, he brings in this event, that Solon who was the firſt who made the Athenians acquainted with it, had drawn it from Egypt, that is, from the ſame ſource as Herodotus [e]. Pomponius Mela ſpeaks alſo of the ſame tradition [f]; ſo does Plutarch [g], Diogenes Laertius, and many other writers of antiquity [h]. They appear all to have had ſome knowledge of a period like that which is the ſubject of this diſſertation; but none of theſe authors have ſpoke of it in an intelligible manner. They expreſs themſelves for the moſt part with as little exactneſs as Herodotus.

Upon the whole, bringing together the different teſtimonies of antiquity which may have any relation to the paſſage we examine, they all agree in telling us, that the Egyptians, and, perhaps, even ſome other ancient nations, had preſerved a confuſed tradition of one or more changes which the diurnal motion of the ſun had undergone, although otherwiſe moſt of theſe teſtimonies are totally repugnant with reſpect to the nature, the number, the time, and the duration of theſe changes. This agreement upon

[d] In politico, p. 535.
[e] In Tim. p. 1043. &c. [f] L. 1. c. 9. p. 60.
[g] De placit. philoſ. l. 2. c. 24. p. 890. & 891.
[h] Achil. Tatius de Arati phænom. c. 24. p. 147.; Solinus, c. 32. p. 44. G. &c.

the

the fundamental point of the narration of Herodotus, is that, no doubt, which has piqued the curiosity of the learned. It has made them believe, that it might be possible to discover what could have given rise to the belief of a fact so extraordinary. As the little conformity amongst ancient authors with regard to the manner in which this phænomenon was operated, joined to the circumstances which had accompanied it, left an open field for the imagination of our modern writers; they have abandoned themselves to conjectures one bolder than another. I think, that their example gives me a right to venture one also, which, besides the novelty of it *, will have at least the advantage of being founded on authentic facts, and not on doubtful suppositions, or upon astronomical intelligence too high for the times in question in this dissertation.

Holy scripture has preserved the history of two miraculous events, concerning the diurnal motion of the earth. The first happened under Joshua, when the course of that star was suspended during a whole day or thereabouts [i]. The second came to pass under the reign of Hezekiah, when the sun was seen to go back considerably, and probably about 150 degrees [k].

Both these facts are anterior to the reign of Sethon; the first of these prodigies even preceded the reign of Atreus

* The explication I am about to propose, occurred to me before reading what P. Calmet says in few words upon this passage of Herodotus, in a preliminary dissertation at the head of the second book of Kings. He has laid down only the foundation and principles of it. I think I have further unfolded that idea.

[i] Joshua, c. 10. v. 12. & 13.; Ecclesiastic. c. 46. v. 5. It is of little importance, as to the reality of the miracle in itself, whether we admit the new system which makes the earth turn round the sun, or whether we follow the ancient opinion of that star's turning round the earth. Whatever system we embrace, the event I speak of will be neither less real nor less miraculous in appearance.

[k] 2 Kings, c. 20. v. 9. &c.; 2 Chron. c. 32. v. 24.; Isaiah, c. 38. v. 7. & 8.; Ecclesiastic. c. 48. v. 25. & 26. The sacred text says, that the shadow went back ten degrees upon the dial of Ahaz. There is great appearance, that each of these degrees indicated an hour, and that, of consequence, the sun went back 150 degrees of the parallel he described that day. But as this estimate is not absolutely certain, I would not precisely determine what interval of time answered to each of these degrees.

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by about 200 years. This laſt muſt have prolonged the day for one half of the earth, and the night for the other half of the hemiſphere, in a manner too ſenſible not to to have been remarked, eſpecially by nations who had any tincture of aſtronomy.

The circumſtances of the ſecond miracle muſt have been ſtill more ſtriking. Suppoſing, that the retrogradation of the ſun was then 150 degrees; it is neceſſary that that ſtar ſhould have riſen upon more than three thouſand leagues of country ſucceſſively, and that at the ſame point of the horizon where he had ſet ſome hours before; that afterwards he ſhould have reſumed his firſt courſe. For the ſame reaſon, they muſt have ſeen him, in the extent of more than three thouſand leagues of our globe, ſet where he had riſen, and riſe anew where he had laſt ſet. With regard to the reſt of the earth, the day muſt have been conſiderably lengthened in one part, and the night muſt have been as much longer in the oppoſite part. There were (ſuppoſing always the retrogradation of the ſun of 150 degrees) ten hours at leaſt from the ſun's riſing upon the horizon at Jeruſalem, when the miracle I ſpeak of happened. By this means, the moſt ſenſible effects fell upon the ocean. This, no doubt, was the occaſion that profane authors have had but a very confuſed notion of it. Of all the regions of our continent, thoſe in which this prodigy muſt have manifeſted itſelf in the moſt ſtriking manner, are the Eaſt Indies, and the moſt weſtern part of Africa, countries of which we have no hiſtorical monument.

It may have been alſo, that the ſun having gone back with regard to Judea preciſely to the point of his riſing, might really have ſet during ſome minutes for Egypt, and for the moſt weſtern countries at the ſame point where he had riſen, and riſen ſoon after reſuming his ordinary courſe preciſely where he had ſet. In Egypt, where the air is always ſerene, they might have ſeen that this prodigy was operated by a real retrogradation of the ſun: in Greece, where, on this ſuppoſition, the phænomenon muſt

muſt have been more ſenſible, the clouds having hidden his diſk, was enough to have cauſed the ſudden darkneſs which muſt, for ſome time, have covered the whole country, to be attributed to an eclipſe [l]. In a word, we may find a thouſand reaſons for the ſilence of moſt profane authors, as well as for the various alterations which thoſe who ſpeak of a change in the diurnal motion of the ſun, may have made in the tradition of this memorable event. Beſides, I find no motive which ſhould hinder us from acknowledging in it the foundation and the principle of that ſame tradition *.

The ſtrongeſt allegation that can be brought againſt the explication which I propoſe, is, without doubt, the opinion of many interpreters and commentators upon the holy ſcripture, who will confine the miracle operated under Hezekiah, to a ſimple retrogradation of the ſhadow of the ſun, independent of the courſe of that ſtar, and that again only upon the dial of Ahaz. But I do not ſee why they will have that retrogradation of the ſhadow not to have been the natural and phyſical effect of the actual retrogradation of the ſun; why the ſame power, who had really ſuſpended the courſe of that ſtar, to give Joſhua time to finiſh the defeat of the enemies of his people, ſhould not have really changed it in conſideration of a juſt and religious prince? The ſcripture tells us, that Berodach-Baladan, King of Babylon, ſent to compliment Hezekiah upon the recovery of his health [m]. Nobody is ignorant how great, in thoſe times, was the power of the kings of Babylon, and how much they thought themſelves above other ſovereigns. We know alſo to what a ſtate of weakneſs the kingdom of Judah was

[l] See Plut. de placit. philoſoph. l. 2. c. 24. p. 890 & 891.

* It ſhould be remarked, that an actual retrogradation of the ſun, ſuch as according to us it came to paſs in the reign of Hezekiah, is the only means of producing the phænomena related by Herodotus, without cauſing alteration in the temperature of the places where they are undergone. On the contrary, the moving of the poles, an explication to which ſome modern critics ſeem to incline, would make the ſame places ſucceſſively undergo the moſt oppoſite temperatures.

[m] 2 Kings, c. 20. v. 12.

then reduced. Whence then could proceed that ſtep of ſuch a monarch as Berodach-Baladan towards Hezekiah? Is it not probable, that the miracle operated in favour of this prince was the principal cauſe, a miracle to which the Babylonians, amongſt whom aſtronomy was then greatly cultivated, could not help giving a particular attention? This is not even a ſimple conjecture on our part; it is a fact of which ſacred ſcripture does not permit us to doubt. It informs us, that the ambaſſadors of the Babylonian monarch were ſpecially charged with informing themſelves of the prodigy which had happened upon the earth [n].

I am therefore perſuaded, that the miracle wrought in the time of Joſhua, joined to that which was wrought ſome ages after in favour of Hezekiah, were the origin and ſource of all thoſe confuſed traditions related in ancient writers upon the change which the courſe of the ſun had twice undergone *.

[n] 2 Chronic. c. 32. v. 31. Attamen in legatione principum Babylonis qui miſſi fuerant ad eum, ut interrogarent de portento quod acciderat ſuper terram, &c.

* To form a juſt idea of the effects produced by the retrogradation of the ſun, ſuch as we underſtand it, we ſhall ſuppoſe that ſtar to have been in the equator the day that this miracle happened, that his retrogradation was of 150 degrees, and that it was four in the afternoon at Jeruſalem at the inſtant when the ſhadow began to go back; or, what comes to the ſame thing, that the ſun was at that moment diſtant 150 degrees from the point of his riſing, and that, of conſequence, his retrogradation brought him back to that ſame point. Then placing Jeruſalem, with moſt geographers, at the 27th degree of longitude, the 87th & 267th degrees ſeparated that part of our globe which had day, from that which had night, at the moment when the retrogradation of the ſun began; that is to ſay, that America, Africa, Europe, and Aſia, as far as the mouth of the Indies or thereabouts, then enjoyed the light of the ſun, while the reſt of the world was plunged in darkneſs. On the contrary, at the moment when the retrogradation of the ſun brought him back to the ſame point where he had ſet out ten hours before, the meridian which paſſes by the 57th degree of longitude, ſeparated the lightened from the darkened hemiſphere. By that, all Aſia, except Anatolia, and almoſt all the Pacific ocean, had then day; but America, as well as Europe and Africa, had night in almoſt all their extent. The inhabitants of the Mogul, of the Indies, of China, of Japan, &c. in a word, all the nations which lie between the 87th and the 237th degrees of longitude, muſt have ſeen the ſun riſe anew upon their horizon, at the ſame point where he had ſet ſome time before, and ſet, after he had reſumed his primordial direction, at the ſame place where his retrograde motion had made him laſt riſe.

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On the contrary, on each ſide of the firſt meridian, as far as the 57th degree of longitude on one ſide, and the 264th on the other, reckoning according to a retrograde order; that is to ſay, in Egypt, in Greece, in Italy, &c. they muſt have ſeen the ſun returning to ſet preciſely where he had riſen, and ſoon after reſume his ordinary courſe, and riſe anew where he had juſt ſet. Between the 57th and the 87th degree, as in Arabia and in Perſia, the day muſt have laſted ten hours longer than ordinary. The moſt ſenſible effect of the miracle muſt have been a kind of balancing of the ſun's diſk.

We are extremely far from giving this explication as preferable in itſelf to any of the other hypotheſes, of which a number may be equally agreeable to the text of holy ſcripture. We may aſſign to the ſun what northern or ſouthern declination we will. We may ſay, that it was more than four in the afternoon at Jeruſalem, when the retrogradation of the ſolar diſk began. We may, in ſtrictneſs, make that retrogradation leſs than 150 degrees, &c. But of all caſes that might be propoſed, we have choſen this, as the moſt ſimple, as well as the moſt conformable that we can conceive, to the effects of the miracle that we examine with relation to the inhabitants of all the zones, and which gives the moſt eaſy calculation of its phænomena. It will be very eaſy to apply the detail, and to extend the explication of it to the other hypotheſes that may be choſen, making only ſome ſlight alterations which cannot be ſubject to much difficulty.

Extracts from the Chineſe Hiſtorians.

By M. LE ROUX DES HAUTES-RAYES, *Royal Profeſſor.*

SIR,

YOU do me the honour to aſk me concerning the book *Y-tſe*; you deſire to know the epocha when the Chineſe diſcovered the art of working iron, and under which of their emperors, it is ſaid, that their ploughſhares were ſtill only of wood. It is not difficult to give you ſatisfaction: but when we quote any thing from the Chineſe hiſtory, it is abſolutely neceſſary to attend, 1. To the times purely fabulous and mythological; 2 To the doubtful and uncertain times; 3. To the hiſtorical times, when the Chineſe hiſtory, ſupported by indiſputable monuments, begins to proceed on ſure grounds.

We cannot make the hiſtorical times of China at the furtheſt aſcend higher than the epocha of Yao; the doubtful and uncertain times begin at Fou-hi, and end at Yao excluſively. The emperors who precede them never exiſted; there remains no ancient monument to confirm the truth of the facts of which their hiſtory is compoſed. We have no certainty about the duration of their reigns; and from the jumble of fabulous and incredible things related of them, we may, I think, very ſafely expunge theſe emperors out of the number of thoſe who have really exiſted. Every one who thinks, and reads with reflection, muſt be convinced of this. In a word, every thing that precedes Fou-hi is entirely fabulous, and deſerves no credit.

As you have thought proper to take notice in your work of the fabulous times of ancient nations; I ſhall, with pleaſure, run over theſe times in the Chineſe hiſtory; delighted, if I can be of any uſe to you, and contribute, with reſpect to China, to the execution of the plan which you have followed. I begin with an examination of the fabulous or mythological times.

1. *Of*

1. *Of the fabulous times.*

Some aſcribe to Tiene-hoang, a book in eight chapters, which contains the origin of letters. They add, that the characters uſed by the Sane-hoang were natural, without any determinate form, that they were nothing but gold and precious ſtones.

Lieou-jou, author of Ouai-ki, ſays, that Tiene-hoang gave names to the ten *KANE*, and to the twelve *TCHI*, to determine the place of the year: this is meant of the cyclic characters.

Tiene-hoang ſignifies emperor of heaven. They call him alſo *Tiene-ling*, the intelligent heaven; *Tſee-jun*, the ſon who nouriſhes and adorns all things; and finally *Tchong-tiene-hoang-kune*, the ſupreme king of the middle heaven, &c. This Tiene-hoang ſucceeded Pouane-cou.

The Ouai-ki ſays, that Ti-hoang (emperor of the earth), the ſucceſſor of Tiene-hoang, divided the day and the night, and appointed thirty days to make one moon. The book Tong-li, quoted in Lopi, adds further, that this emperor fixed the winter-ſolſtice to the eleventh moon. A proof that the Chineſe year was originally very incorrect, and that the courſe of it was regulated only by that of the ſeaſons, is, that for a long time, to expreſs a year, they ſaid a change of the leaves.

This Ti-hoang, ſay they, was father of Tiene-hoang, and of Gine-hoang who follows.

They give Gine-hoang (ſovereign of men) nine brothers, and pretend, that they divided the government among them. They were nine brothers (ſays Yuene-leao-fane) who divided the earth among them, and built cities, which they ſurrounded with walls. It was under this prince (ſays Lopi), that there firſt began to be a diſtinction between the ſovereign and the ſubject: they drank, they eat, and the two ſexes united.

After theſe three emperors which we have juſt now named, they place the period named *Ou-long* (the five

Long

Long or dragons) compoſed of five different families. But they do not tell us their names, nor the duration of their reigns. In theſe times (ſays an author) men dwelt in the bottom of caves, or perched upon trees as it were in neſts. This fact contradicts the invention of building cities, and ſurrounding them with walls, which they place under the reign of Gine-hoang; but you will meet with many ſuch contradictions in the ſequel.

They ſay nothing of the third Ki. Of the fourth, named *Ho-lo*, and compoſed of three families, they ſay, that the Ho-lo taught men to retire into the hollows of rocks. This is all they ſay of it. Neither do they ſay any thing of the fifth Ki, named *Liene-tong*, and compoſed of ſix families; of the ſixth Ki, named *Su-ming*, and compoſed of four families.

It is a folly to dwell upon the epocha of theſe ſix Ki; nothing is more abſurd. Lopi cites an author who generouſly gives them 1,100,750 years duration; Lopi ſays himſelf, that the five firſt Ki after Gine-hoang make in all 90,000 years.

The ſeventh Ki is named *Sune-fei*, and comprehends twenty-two families. But they ſay nothing under all theſe reigns that has any relation to the arts or ſciences. Only under the twenty-ſecond and laſt, named *Tſee-che-chi*, they ſay, that it was not till then men ceaſed to dwell in caves. Is it not a palpable abſurdity, that after ſo many ages, and under kings of whom they relate ſo many wonders, they had not yet found out the art of building huts to ſhelter them from the winds and rains?

The eighth Ki, named *Yne-ti*, contains thirteen families or dynaſties. Tchine-fang-chi, the firſt of this period, reigned after Tſee-che-chi, and founded the firſt family. They ſay, that at the beginning men covered their bodies with leaves and herbs; ſerpents and beaſts were very numerous; the waters which had overflowed, were not yet returned into their channels, and the miſery of mankind was extreme. Tchine-fang taught men to prepare ſkins, to take off the hair

hair with rollers of wood, and uſe them againſt the winds and froſts which incommoded them very much. He taught them alſo to make a kind of web of their hair, to ſerve them as a covering to their heads againſt the rain. They obeyed him with joy; he called his ſubjects, *people clothed with ſkins:* he reigned 350 years. To Tchine-fang-chi ſucceeded Chou-chane-chi, then Hai-kouei-chi, of whom they ſay nothing which has any relation to our ſubject.

The fourth prince, who alſo ſucceeded Hai-kouei-chi, was named *Hoene-tunè;* he founded the fourth dynaſty, (for each of theſe princes which we have juſt now mentioned, was the founder of a family or dynaſty.) In the hiſtory of this king, Lopi quotes Lao-chene-tſee, who ſpeaks thus.

"The ancient kings wore their hair diſhevelled, without any ornament upon their heads. They had neither ſceptre nor crown, and they governed their people in peace. Being of a beneficent diſpoſition, they cheriſhed all things, and put no perſon to death. Always giving, and never receiving any thing, their ſubjects, without dreading their power as maſters, revered their virtue in their hearts. Then heaven and earth obſerved a moſt beautiful order, and every thing flouriſhed in a ſurpriſing manner. The birds built their neſts ſo low, that they might be reached with the hand; all the animal creation tamely ſubmitted to the will of man. Then the juſt medium was obſerved, and harmony reigned over all. They did not reckon the year by the days. There was no diſtinction between within and without, between mine and thine. In this manner reigned Hoene-tune. But when mankind had degenerated from this happy ſtate, birds and beaſts, inſects and ſerpents, all together, and as it were in concert, made war againſt them."

To this dynaſty of Hoene-tune, ſucceeded that of Tong-hou-chi, containing ſeven kings which are not named. To this fifth dynaſty ſucceeded the ſixth, whoſe founder was Hoang-tane-chi.

The 7th, the dynaſty of Ki-tong-chi *.

The 8th, the dynaſty of Ki-y-chi *.

The 9th, the dynaſty of Ki-kiu-chi *.

The

The 10th, the dynaſty of Hi-ouei-chi *.

The 11th, the dynaſty of Yeou-tſao-chi.

The 12th, the dynaſty of Soui-gine.

The 13th and laſt, the dynaſty of Yong-tching-chi.

Of theſe ſeven kings, or founders of dynaſties, which remain to be conſidered to complete the number of dynaſties included in this eighth period, nothing is ſaid of thoſe I have marked * that has any relation to our ſubject.

As to Yeou-tſao-chi, founder of the eleventh dynaſty, whoſe reign, they ſay, laſted more than 300 years, and whoſe family, they add, continued more than 100 generations during the ſpace of 12 or 18,000 years: here is what we find recorded.

Hane-tſee ſays, that, in the firſt ages of the world, animals multiplied very faſt, and that men being but few, they could not ſubdue the beaſts and ſerpents.

Yene-tſee † ſays alſo, that the ancients, either perched on trees, or ſtretched in hollow caves, poſſeſſed the univerſe (Tiene-hia, that is to ſay, China). Theſe good kings (continues he) breathed nothing but charity without any ſhadow of hatred. They gave much, and took nothing. The people did not go to pay their court to them, but all the world ſubmitted to their virtues.

Lopi and Ouai-ki ſay almoſt in the ſame words, that, in the moſt remote antiquity, men ſheltered themſelves in the hollows of rocks, that they dwelt in deſerts, and lived in ſociety with all the other creatures. They had no thought of doing any injury to the beaſts, and the beaſts did not think of hurting them. But in the ſucceeding ages they became too wiſe, which made the animals rebel; armed with claws, teeth, horns, and venom, they aſſaulted man, and man was not able to reſiſt them. Yeou-tſao reigned then. He was the firſt who built houſes of wood, in the form of birds neſts; he perſuaded men to retire into them to avoid the wild beaſts. They did not know as yet how to cultivate

† Yene-tſee was miniſter of ſtate under three kings of Tſi, he was cotemporary with Koung tſe.

the

the earth, they lived on herbs and fruits. They drank the blood of animals, they devoured their fleſh quite raw, they ſwallowed the hair and the feathers. This is what they ſay of Yeou-tſao-chi: after him comes Soui-gine, founder of the 12th dynaſty.

Soui-gine-chi is eſteemed the inventor of fire.

On the ſummit of the mountain Pou-tcheou, ſays an author, are to be ſeen the walls of Juſtice. The ſun and the moon cannot approach them; there is no difference of ſeaſons there, nor viciſſitudes of days and nights. This is the kingdom of light on the confines of Si-ouang-mou *. A ſaint (a great man) went to make a tour beyond the bounds of the ſun and moon: he beheld a tree, and upon that tree a bird, who made fire come out of it by picking it. He was ſurpriſed at this; he took a branch of this tree, and from thence ſtruck fire; from whence they called this great perſonage *Soui-gine*.

Other authors ſay alſo, that Soui-gine made fire with a certain kind of wood, and taught men to dreſs their victuals. By this means all diſeaſes, and all diſorders of the ſtomach and bowels were prevented. In this he followed the direction of heaven, and from thence was named *Soui-gine*.

They ſay further, that, in the days of Soui-gine, there was much water upon the earth, and that this prince taught men the art of fiſhing. He muſt, of conſequence, have invented nets or lines, which invention is after this aſcribed to Fou-hi.

One Long-ma, or Dragon-horſe, brought him a kind of table, and the tortoiſe letters. Soui-gine is the firſt to whom they apply this event, but the ſame thing will be ſaid in the ſequel of ſeveral others.

Soui-gine was the firſt who gave names to plants and animals; and theſe names (ſay they) were ſo expreſſive, that the nature of every thing was known by its name. He invent-

* Si-ouang-mou ſignifies literally, *the mother of the king of the weſt*. This is the name of a kingdom which the Chineſe place in the weſt of Ta thſine, of the lake called *Weak Water*, and of the deſert named the *running ſands*. If *Weak water* is the Dead ſea, *Si-ouang-mou* may be Egypt.

ed weights and meaſures for the regulation of commerce, which had been unknown before him.

Anciently (ſays an author) men married at fifty, and women at thirty years of age: Soui-gine ſhortened this period, and appointed that young men ſhould marry at thirty, and girls at twenty.

Laſtly, the Liki ſays, that it was Soui-gine who firſt taught men urbanity and politeneſs.

It now remains to ſpeak of Yong-tching-chi, the founder of the thirteenth and laſt dynaſty of this period.

In his time, they uſed ſlender cords on which they tied various knots, and this ſerved them inſtead of writing [b]. But, after the invention of letters, how could they return again to the uſe of theſe cords, which is ſo limited and imperfect? This, as you perceive, implies a contradiction.

I come now to the ninth Ki or period, named *Chene-tong*. This ninth period will bring us down to the times of Fou-hi. It comprehends twenty-one kings, whoſe names are as follow:

1. Sſe-hoang or Tſang-hie.
2. Pe-hoang-chi.
3. Tchong-hoang-chi.
4. Tai-ting-chi.
5. Kouene-liene.
6. Yene-chi.
7. Tai-chi.
8. Tching-hoei-chi.
9. Li-lou or Hoei-chi.
10. Sohoang-chi.
11. Nuei-touane-chi.
12. Hiene-yuene.
13. He-ſou.
14. Kai-tiene.
15. Tſune-liu-chi.
16. Tchô-jong.
17. Hao-yng.
18. Yeou-tſao-chi.
19. Tchu-ſiang-chi.
20. Yne-kiiang-chi.
21. Vou-hoai-chi.

Liu-pou-ouei ſays plainly, that Sſe-hoang made letters. This Sſe-hoang is called alſo *Tſang-hie*. Some hiſtorians place him under Hoang-ti, whoſe miniſter they make him; while others make him a ſovereign prince, and much anterior to Hoang-ti, as you ſee: but I ſhall leave to the Chineſe to ſettle this point.

[b] The Peruvians uſed this kind of writing before the Spaniards conquered their country.

The

The firſt inventor of letters was Tſang-hie, then the king You-hoai made them be ingraved on the coin, and Fou-hi uſed them in the public acts for the government of the empire. But obſerve that theſe three emperors were even before Chini-nong; how can it be ſaid then that letters were not invented till under Hoang-ti? Such is the reaſoning of Lopi, who was quite confounded with theſe fabulous times.

To this criticiſm it may be anſwered, You have told us that letters had been invented in the reign of Souigine, the 12th king of the eighth period; how then can you pretend to give the honour of this invention to Tſang-hie, who, according to your own teſtimony, did not flouriſh till the ninth period? However this may be, Sſee-hoang (ſay ſome romancers) knew to form letters the moment he was born. He was endowed with great wiſdom, &c. After he had received the Ho-tou [c], he viſited the ſouth, went upon Mount Yang-yu, and ſtopped on the bank of the river Lo. A divine tortoiſe carrying blue letters upon his ſhell, delivered them to him: then Sſee-hoang penetrated all the changes of heaven and earth; above he obſerved the various configurations of the ſtars; below he examined all the marks he had ſeen upon the tortoiſe; he viewed the plumage of birds, he took notice of the mountains, and of the rivers which flow from them, and of all this he compoſed letters. Some very learned Chineſe think, that this was the ancient kind of writing named *Ko-teou chu*, which continued (they ſay) to the reign of the Emperor Suene-ouang, that is, to the year 827 before J. C.

But Cong-yng-ta very well obſerves, that though the external figures of the letters have changed ſeveral times in ſome things, the ſix rules on which Tſang-hie formed them, have never ſuffered any change [d].

Then

[c] The Ho-tou is a kind of table, on which are drawn various ſtrokes or lines, in which, at certain diſtances, are little black and white circles.

[d] In general, I think, contrary to the opinion of M. Freret, that the Chi-

Then (continues Lopi) there was a difference between the ſovereign and the ſubject, relation between the father and the ſon, diſtinction between the precious and the vile; laws appeared, rites and muſic reigned. Puniſhments were inflicted with vigour. Thus Sſee-hoang laid the foundations of good government, he appointed officers for each affair, the ſmalleſt did not eſcape him; and thus heaven and earth arrived at their full perfection.

They ſay nothing of the ſucceſſor of Sſee-hoang which has any relation to our ſubject; but they ſay, that, under the reign of Tchong-hoang-chi the third king of this period, they ſtill uſed ſlender cords for writing.

From this prince we come at once to Hiene-vuene the 12th in order of this period, becauſe nothing is ſaid of his predeceſſors.

We find a great many things under the reign of this prince, becauſe he is the ſame with Hoang-ti, or at leaſt they have confounded theſe two princes together.

They aſcribe to Hiene-yuene the invention of cars. He joined two pieces of wood together, the one placed upright, and the other acroſs, to the honour of the Moſt High [e]. It is from this he is called *Hiene-yuene*. The piece of wood placed acroſs is called *hiene*, and that which is placed upright is called *yuene*. Hiene-yuene ſtruck copper money, and made uſe of the balance to determine the

reſe characters were ſignificant repreſentations of objects. The ſix rules mentioned in this paſſage afford a proof of this; and beſides, this is the moſt ſimple and moſt natural idea that could occur to men; in a word, the Chineſe characters and the Egyptian hieroglyphics are the ſame as to their formation. We know that the ſacred writing uſed by the hierogrammatiſts or ſacred writers of the Egyptians, was ſubdivided into Κυριολογικὴ and Συμβολικὴ, that is to ſay, into characters repreſentative of objects, and allegorical characters, to which we may refer the ſix rules of the Chineſe here mentioned. In like manner again, as the Chineſe ſay of the inventors of writing, that they viewed the heavens to obtain models of this writing, ſo likewiſe Sanchoniatho ſays of Thaaut or Mercury, that he imitated heaven in forming the ſacred characters. Apud. Euſeb. præp. evang. l. 1. c. 10.

[e] The religious monuments of the Greeks were originally conſtructed in this manner. See Plut. t. 2. p. 478. A.

weight

weight of things. By this means he ruled the world in peace. *Ho* ſignifies merchandiſe in general. Formerly they wrote ſimply *hoa*, which ſignifies exchange. Theſe merchandiſes (they ſay) conſiſted in metal, *kine*, in precious ſtones, *yu*, in ivory, *tchi*, in ſkins, *pi*, in coined money, *tſuene*, and in ſtuffs, *pou*, &c.

They then denominated money (as is done ſtill) by the name of the reigning family. That of Hiene-yuene was one inch ſeven lines, and weighed twelve *tchu*, [the *tchu* is the 20th part of a *yo*, and a *yo* weighs 1200 little grains of millet]. They then ingraved letters on their money (as is ſtill done at preſent). It is for this reaſon that *ven-tſee*, letters, ſignifies alſo a piece of money, which is called likewiſe *kini*, and *tſuene*, and *tao*.

Tcho-jong (16th emperor of the 9th period) hearing at Cang-tcheou the ſinging of birds, compoſed a muſic of union whoſe harmony penetrated every where, touched the intelligent ſpirit, and calmed the heart of man, in ſuch a manner that the external ſenſes were ſound, the humours in equilibrio, and the life very long. He called this muſic *Tſie-ouene*, that is to ſay, temperance, grace, and beauty [f].

But the deſign, and in ſome ſort the only aim of the ancient muſic of the Chineſe, according to their authors, was the harmony of the virtues, the moderation of the paſſions, elegance of manners, and, in a word, every thing that can contribute to the perfection of a good and wiſe government; &c. For they were perſuaded that muſic was capable of working all theſe miracles. It is difficult for us to believe them in this, eſpecially when we conſider the muſic which is at preſent uſed amongſt them. But I appeal to the Greeks, who related as aſtoniſhing effects

[f] It is thus Lucretius ſays, that muſic was modelled after the ſinging of birds.

At liquidas avium voces imitarier ore
Ante fuit multo, quam lenia carmina cantu
Concelebrare homines poſſent, aureſque juvare.

from

from this agreeable invention, whilſt the modern Greeks, like moſt part of the Orientals, have no muſic but a wretched and contemptible monotony. Beſides, we ſhall have occaſion elſewhere to treat of muſic a little more at large.

The 17th king of the 9th period is named Hao-yng. In his time they cut down the branches of trees to kill beaſts with. Men were few. Nothing but vaſt foreſts were every where to be ſeen, and theſe frightful woods were filled with wild beaſts. How contradictory is this, and how incompatible with the times in which this prince is ſaid to have reigned!

The 18th king of the 9th period is called *Yeou-tſao-chi*. We have ſeen in the preceding period, a prince of the ſame name. The Ouai-ki-places this king at the beginning of the laſt ki, and gives him for ſucceſſor Soui-gine. At this rate nine entire periods, or ki, muſt have elapſed before men knew how to build huts, or had the uſe of fire. Lopi follows another method: he has ranged Yeou-tſao-chi and Soui-gine in the preceding period; and although the king we are now ſpeaking of bears the ſame name, he ſpeaks of him quite differently.

The 19th king of the 9th period is named *Tchu-ſiang-chi*.

They ſay that he commanded Sſee-kouei to make a kind of guitar with five ſtrings named *ſe*, to remedy the diſorders of the univerſe, and preſerve every thing that had life.

The 20th king of the 9th period is named *Yne-khang-chi*.

In his time, the waters did not flow, the rivers did not purſue their uſual courſe, which occaſioned a great number of diſeaſes.

Yne-khang inſtituted the dances called *Ta-vou* (grand dances), with a view to preſerve health: for, as Lopi ſays, when the body is not in motion, the humours have not a free courſe; matter is amaſſed in ſome part, from whence come diſeaſes, which all proceed from ſome obſtruction.

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The Chineſe alſo imagine, that a man's virtues may be known by his manner of touching the lute and drawing the bow, &c.

Thus the Chineſe make dances as well as muſic have a reference to good government; and the Liki ſay, that we may judge of a reign by the dances which are uſed in it.

The 21ſt and laſt king of the 9th period is named *Vou-hoai-chi*; but they relate nothing of this prince which is worthy of notice.

This is all that the fabulous times contain. If theſe times cannot enable us to fix the real epocha of various inventions, (as the Chineſe are ſo full of contradictions about the time of theſe different diſcoveries), we ſee at leaſt from them, that the origin of arts has been much the ſame among them as among other nations. We are now come down to Fou-hi, who is conſidered by the Chineſe hiſtorians as the founder of their monarchy. What they ſay of this prince and his ſucceſſors, has ſome more ſolidity in it than what we have hitherto ſeen.

FOU-HI.

The Ouai-ki quoted in the Chineſe annals, thus deſcribes the manners of mankind in theſe days. "In the "beginning, men differed nothing from other animals in "their way of life. As they wandered up and down in the "woods, and women were in common, it happened that "children never knew their fathers, but only their mothers. "They abandoned themſelves to luſt without ſhame, and "had not the leaſt idea of the laws of decency. They "thought of nothing but ſleeping and ſnoring, and then "getting up and yawning. When hunger preſſed them, "they ſought for ſomething to eat; and when they were "glutted, they threw the reſt away. They eat the very "feathers and hair of animals, and drunk their blood. "They clothed themſelves with ſkins quite hairy. The

"Emperor

" Emperor Fou-hi began by teaching them to make lines " for catching fiſh, and ſnares for taking birds. It was " for this, that this prince was named *Fou-hi-chi.* He " taught them further to feed domeſtic animals, and to " fatten them for ſlaughter; for which they gave him the " ſirname of *Pao-hi-chi.*"

It ſeems evident, that the ancient Chineſe had at firſt no other habitation than caves, the hollows of rocks and natural dens. They were then infeſted with a kind of inſect or reptile called *iang*; and when they met, they aſked one another, Are you troubled with *iangs?* To this day they make uſe of this expreſſion, in aſking after any perſon's health: *Couei-iang?* What diſeaſe have you? How do you do? *Vou-iang*, I am without *iang*; that is to ſay, I am hearty, in perfect health, without any ailment.

It would be ſuperfluous to relate here, what the Chineſe ſay, in their annals, of the invention of characters, and of *coua*, after what has been ſaid by F. Couplet and ſo many others on that ſubject. I ſhall only add, that the treatiſe *Hi-tſee*[h] bears, that, at the beginning, nations were governed by means of certain knots which they made on ſlender cords: that afterwards the ſaint introduced writing in their place, to aſſiſt the mandarins in performing all their offices, and the people in examining their conduct; and that it was by the ſymbol ☲ Kouai, that he conducted himſelf in the execution of his work.

Lopi, whom we have ſo often quoted already, ſays, that Fou-hi extracted from the ſymbol of ſix lines every thing that concerned good government. For example, ☶ Li gave him the hint of making lines for hunting and fiſhing, and theſe lines were a new occaſion of inventing ſtuffs for garments. Lopi adds, that it is a miſtake to

[h] This is the treatiſe in queſtion. Confucius is the author of it, it is a commentary on the Y-king. They call this commentary, out of reſpect to its author, *Ta-tchouens*, the great tradition. I ſhould be wrote *Hi-tſee*, and not *I-tſee*.

imagine,

imagine, that, in the times of Fou-hi, they still used cords tied and knotted, and that books were not introduced till under Hoang-ti.

Fou-hi taught men to rear the six domestic animals [j], not only for food, but also for victims, in the sacrifices which they offered to *Chine*, and to *Ki* [k]. They pretend that Fou-hi regulated the rites *Kiao-chene*.

Fou-hi also instituted marriage; before this the intercourse of the sexes was indiscriminate: he settled the ceremonies with which marriages were to be contracted, in order to render this great foundation of society respectable. He commanded the women to wear a different dress from that of the men, and prohibited a man's marrying a woman of the same name, whether a relation or not, a law which is actually still in force.

Fou-hi appointed several ministers and officers to assist him in the government of the empire.

One of these officers made the letters, another drew up the calendar, a third built the houses, a fourth practised medicine, a fifth cultivated the ground, a sixth was the master of the woods and waters.

They pretend that Fou-hi applied himself very much to astronomy. The Tcheou-pi-souane says, that he divided the heavens into degrees. Lopi takes notice, that properly the heavens have no degrees, but that this term is used with relation to the path of the sun in the course of a year.

The period of sixty years is reckoned due to Fou-hi. The Tsiene-piene says plainly, that this prince made a calendar to fix the year, and that he is the author of Kia-tse. The Sane-sene says the same thing; and the Hane-li-tchi says, that Fou-hi made the first calendar by the Kia-tse; but the Chi-pene ascribes this to Hoang-ti. This is one of these contradictions so common in the Chinese historians.

The same Fou-hi, they say, made arms and ordained

[j] The six domestic animals, according to the Chinese, are the horse, the ox, the hen, the hog, the dog, and the sheep.

[k] *Chine*, the spirit of heaven, and *Ki*, the spirit of the earth.

puniſhments. Theſe arms were of wood, thoſe of Chin-nong were of ſtone, and Tchi-yeou made ſome of metal.

Fou-hi drained off the waters, and ſurrounded the cities with walls. In the mean time, as Chin-nong is eſteemed the firſt who made walls of ſtone, we muſt ſuppoſe, that thoſe raiſed by Fou-hi were only of earth or brick.

Fou-hi gave rules to muſic. Thoſe who aſcribe this fine art to Hoang-ti are deceived (or *vice verſa.*) After Fou-hi had invented fiſhing, he made a ſong for the fiſhers. It was from his example that Chin-nong made one for the labourers.

Fou-hi took of the wood of Tong; he made it hollow; and of it made a *kine* (a lyre, or what you pleaſe to tranſlate it) ſeven feet two inches long; the ſtrings were of ſilk, to the number of 27; he commanded this inſtrument to be named *Li.* Others ſay it had but 25 ſtrings, others 10, and others only 5; (which of them ſhall we believe?) Beſides, others make this inſtrument only three feet ſix inches ſix lines in length.

Fou-hi made this inſtrument, ſay ſome, to ward off inchantments, and baniſh impurity of heart.

He took of the wood of *ſang*, and made alſo a guitar of 36, or rather of 50 ſtrings. This inſtrument ſerved to adorn the perſon with virtues, and to regulate the heart, &c. Laſtly, he made a third inſtrument of baked earth; after which, ſay they, ceremonies and muſic were in high eſteem.

The money which Fou-hi introduced, was of copper, round within to imitate heaven, and ſquare without to reſemble the earth [1].

He himſelf made trial of many medicinal plants. (This

[1] The Chineſe repreſent the earth ſquare. This ignorance of the figure of our globe has nothing in it ſurpriſing, when we conſider how little progreſs aſtronomy has made in China. I regard further this error, perpetuated among the Chineſe vulgar, as ariſing from hence, that they give theſe denominations to the Chineſe empire, which belong only to the whole globe. Such, for example, is the expreſſion *Thiene-hia*, word for word, *inferior heaven*, or *that which is under heaven*, a name by which they commonly diſtinguiſh that empire in their books. Now, under the Emperors Yao, Chune, and Yu, they made ſeveral diviſions of that empire, and one among others, by which they repreſented it perfectly ſquare, in order to determine, by this means, the quantity and quality of its revenues. The Chineſe knew no better.

is

is moſt commonly ſaid of Chin-nong: but it is pretended, that Chin-nong finiſhed what Fou-hi had begun.)

This is all we read of Fou-hi. You will remark ſeveral contradictions in moſt of theſe traditions, eſpecially when you come to ſee in the ſequel, that almoſt all theſe inventions are aſcribed to the ſucceſſors of Fou-hi. I leave it to your penetration and critical ſkill, to judge what regard is due to the beginnings of the Chineſe hiſtory.

I have ſtill ſome reigns to examine, before I have done with the fabulous and uncertain times.

They ſay of Koung-koung, that he employed iron in making hangers and hatchets.

They aſcribe to Niu-oua (who is the Eve of the Chineſe) ſeveral inſtruments of muſic. The inſtruments *ſeng* and *hoang* ſerved her, ſay they, to communicate with the eight winds. By means of *kouene*, or double flutes, ſhe united all ſounds into one, and made concord between the ſun, moon, and ſtars. This is called *perfect harmony*. Niu-oua had a guitar (*ſe*) of five ſtrings; ſhe made another of 50 ſtrings, whoſe ſound was ſo affecting, that it could not be borne; wherefore ſhe reduced theſe 50 ſtrings to 25, to diminiſh its force.

The Emperor Chin-nong is very famous among the Chineſe, by the great diſcoveries which, they ſay, he made in medicine, agriculture, and even in the military art, ſince they believe, that, in the times of *Han*, they had a book of this prince on the military art.

A fondneſs for the marvellous has made ſome ſay, that, at three years of age, he knew every thing that concerned agriculture. The very name *Chin-nong*, in the Chineſe language, ſignifies, *the ſpirit of huſbandry*. Chin-nong took very hard wood, of which he made the coulter of the plough, and ſofter wood of which he made the handle. He taught men to cultivate the earth. They aſcribe to him the invention of wine. He ſowed the five kinds of grains on the ſouth of Mount Ki, and taught the people to make them their food.

Chin-nong commanded that they ſhould be diligent in

gathering the fruits which the earth produced. He taught every thing relative to hemp, to the mulberry-tree, and the art of making cloth and ſtuffs of ſilk. They owe alſo to Chin-nong the potters and the founders art; others, however, aſcribe pottery to Hoang-ti, and the art of melting metals to Tchi-yeou.

Chin-nong invented fairs in the middle of the day. This was the origin of commerce and mutual exchanges. He made uſe of money to facilitate trade. He inſtituted feſtivals.

Chin-nong diſtinguiſhed plants, determined their various properties, and applied them ſkilfully in the cure of diſeaſes. They ſay, that, in one day, he made trial of 70 kinds of poiſons, ſpoke of 400 diſeaſes, and taught 365 remedies. This makes the ſubject of a book, intitled, *Pouene-tſao*, which they aſcribe to him, and which contains four chapters. Others alledge, and with reaſon, that this book is not ancient. They ſay, with as little truth, that Chin-nong made books ingraved on ſquare plates.

Chin-nong cammanded Tſiou-ho-ki to commit to writing every thing relative to the colour of ſick perſons, and what concerned the pulſe, to teach how to examine its motions if they were regular and harmonious, and for this end, how to feel it from time to time, and acquaint the patient.

Chin-nong compoſed ballads or ſongs on the fertility of the country. He made a very beautiful lyre, and a guitar adorned with precious ſtones, to form the grand harmony; to bridle concupiſcence, to elevate virtue to the intelligent ſpirit, and bring men back to the celeſtial verity.

Chin-nong aſcended a car drawn by five dragons. He was the firſt that meaſured the figure of the earth, and determined the four ſeas. He found 900,000 lys is weſt, and 850,000 is north and ſouth. He divided all this vaſt ſpace into kingdoms *.

* Under theſe exaggerated meaſures they ſpeak of China. This is evident from the four cardinal points which they give this empire, as Kiao to the ſouth, Yeou to the north, Yang-cou to the eaſt, and San-ouei to the weſt; for theſe were, in the times of Yao and Chune, the limits and extremities of China.

Among

Among the ſucceſſors of Chin-nong they place Hoang-ti, and the rebel Tchi-yeou, whom they make the inventor of arms of iron, and ſeveral kinds of puniſhments. Tchi-yeou had the power of raiſing miſts and darkneſs extremely thick. Hoang-ti knew not how to attack and overcome him. He accompliſhed it however, by forming a car, on which he placed a figure whoſe arm of itſelf always turned to the ſouth, in order to point out the four regions *. Hoang-ti uſed the lance and buckler.

Tchi-yeou ordered ſabres, lances, and croſs-bows to be made. They aſcribe to Hoang-ti the *kia-tſe*, or cycle of 60 years, or at leaſt Ta-nao made it by his direction.

The Mandarin Tſang-kiai was charged to compoſe hiſtory. Yong-tcheng made a ſphere which repreſented the celeſtial orbs, and diſcovered the polar ſtar.

Li-cheou regulared numbers, and invented an inſtrument for computation, like to, or the ſame with that which is ſtill in uſe in China and India; and of which Martini, in his Decades, and la Loubere, in his voyage to Siam, have given us the deſign and deſcription.

Ling-lune, a native of Yuene-yu in the weſt of Ta-hia, (that is, Khoraſſan), took reeds in the valley of Hiai-ki; he cut two of an equal length, and blew into them: this gave occaſion to the invention of bells. He adjuſted twelve of theſe reeds to imitate the ſong of fong-hoang, the royal bird, (one of the fabulous birds of the Chineſe). He divided theſe reeds into twelve *lu*; ſix ſerved to imitate the ſong of the male, and ſix that of the female. Finally, this man brought muſic to perfection, and explained the order and arrangement of different ſounds. By means of theſe lu-lu, he governed the Khi of the Yne and of Yang, he determined the change of the four ſeaſons, and gave calculations for aſtronomy, geometry, and arithmetic.

Yong-yuene, by order of Hoang-ti, made twelve bells

* Some modern authors fancy they perceive in this the invention of the compaſs.

of

of copper, which correſponded to the moons, and ſerved to adjuſt the five tones, and fix the ſeaſons, &c. fables!

Hoang-ti invented a kind of diadem or tiara, called *Miene*. He ordered a blue and yellow robe to be made for himſelf, in imitation of the colours of heaven and earth. Having viewed the bird *hoei*, and conſidered the variety of its colours, as well as thoſe of the flowers, he made garments be dyed of different colours, to make a diſtinction between the great and ſmall, the rich and poor.

Nin-ſong and Tche-tſiang invented mortars for pounding rice; kettles or caldrons: they invented the art of building bridges, and of making ſhoes; they made coffins for the dead; and men reaped great advantages from all theſe inventions. Hoei invented the bow, Y-meou arrows; Khy-pe invented the drum, which made a noiſe like thunder, trumpets, and horns, which imitated the voice of the dragon.

Kong-kou and Hoa-hu, by order of the Emperor Hoang-ti, hollowed a tree of which they made a ſhip; of the branches of the ſame tree they made oars; and by this means they were able to penetrate into places which ſeemed inacceſſible, and where men had never been.

For the tranſportation of merchandiſe by land, they alſo invented chariots under this reign, and trained oxen and horſes to draw them.

Hoang-ti alſo turned his thoughts to buildings, and gave models of them. He built a temple, called *Ho-kong*, in which he ſacrificed to *Chang-ti*, or to the Supreme Being.

With a view to facilitate commerce, Hoang-ti ſtruck money, called *kine-tao*, *knife of metal*, becauſe it had the ſhape of the blade of a knife.

Hoang-ti having obſerved that men died before the time fixed by nature, of diſeaſes which carried them off, he commanded Yu-ſou, Ki-pe, and Lei-kong, three famous phyſicians of theſe times, to aſſiſt him to determine what remedies were proper for each diſeaſe.

Si-ling-chi,

Si-ling-chi, the chief conſort of that emperor, contributed on her part to the good of the ſtate, and taught the people the art of rearing ſilk-worms, of ſpinning their cods, and making ſtuffs of them.

The Ouai-ki, from whence I take almoſt all this, takes notice, that Hoang-ti commanded China to be meaſured, and divided it into provinces or tcheou. Each *tcheou* was compoſed of ten *che*, each *che* was compoſed of ten *tou*, and each *tou* contained ten *ye*, or ten cities. Theſe ten *ye*, or cities, had each five *ly*, or ſtreets, &c.

The empire of Hoang-ti, which, according to this hiſtorian, ſeems to have been conſiderable, extended on the eaſt to the ſea, on the weſt to Khong-tong. It was bounded on the ſouth by Kiang, and on the north by the country of Hoene-jo.

They ſay nothing which has any relation to the arts under the three princes who follow Hoang-ti; that is to ſay, under the reigns of Chao-hao, who reigned 84 years; of Tchouene-hio, who reigned 78 years; and of Cao-ſine, who reigned 70 years. They obſerve only, that Chao-hao made them beat the watches with a drum: this ſuppoſes that they had then ſome inſtrument for marking the hours. The Se-ki adds, that this emperor levelled the highways, in order to render the mountains acceſſible, and that he cleared the channels of rivers. He made alſo a new kind of muſic, called *Ta-yuene*, to unite men and genii, and reconcile high and low.

Father Gaubil, and other learned men, have ſaid enough of the aſtronomical knowledge of the Emperor Tchouene-hio, and of the changes which he made in the manner of obſerving the celeſtial motions, by inventing a machine which ſerved for equations, aſcenſions, &c. I ſhall therefore content myſelf with referring you to their works, in which you will ſee what the Chineſe think, both of this ancient aſtronomy, and of the pretended conjunction of the five planets in the conſtellation *Che*, which happened, as they ſay, under this prince.

After

After having overcome the fatigue of ſo many fabulous traditions, I am now arrived at the hiſtorical times. But before we enter upon them, it will not be improper to make ſome reflections which are abſolutely neceſſary to ſhew how little regard is due to this ſort of traditions. I think theſe reflections ſo much the more important, as they will help to undeceive a great many people of the miſtake they are in about the Chineſe antiquities.

The Chineſe monarchy begun by three princes, diſtinguiſhed by the title of *Sane-hoang*, that is to ſay, the *three Auguſti*. Theſe three Auguſti, according to the moſt generally received opinion, are *Fou-hi*, *Chine-nong*, and *Hoang-ti*. The five emperors, ſucceſſors of the Sane-hoang, are diſtinguiſhed by the title of *Ou-ti*, that is to ſay, *the five emperors*. The five emperors are, *Chao-hao*, *Tchouene-hio*, *Tico*, *Yao*, and *Chune*. This diviſion has been followed by Cong-ngane-coue, the great-grandſon of Confucius, in the eighth generation, and one of the moſt celebrated writers of the dynaſty of Hane. It has been adopted alſo by Hoang-fou-mi, and by moſt part of the beſt writers. The proofs of this opinion are taken partly from the book Tcheou-li, an ancient record, or ſtate of the empire, which many aſcribe to the famous Tcheou-cong, miniſter and brother of Vou-vang, who was the founder of the imperial dynaſty of Tcheou, eleven hundred and ſome odd years before the Chriſtian æra; partly from the commentaries of Tſo-kieou-mine, on the Tchune-tſieou of Confucius his maſter. In theſe works, mention is made of the books, Sane-ſene and Ou-tiene, which, they ſay, are the hiſtories of the three Hoang, and of the five Ti: now, the two firſt chapters of Chou-king, which contain an extract of the hiſtories of Yao and of Chune, bore the title of *Tiene yao* and *Tiene-Chune*; from whence it was concluded, that Yao and Chune were two of the five Ti; conſequently Fou-hi, Chin-nong, and Hoang-ti, were what are called the three Hoang; and Chao-hao, Tchouene-hio, Tico, Yao, and Chune, were the five Ti.

You

You will no doubt think theſe but feeble proofs to ſupport an hiſtorical fact of this kind; but thoſe who are of a contrary opinion, bring nothing to induce us to believe them, rather than Cong-ngane-coue and Hoang-ſou-mi.

Hou-chouang-hou, in a preface before the Tſiene-piene of Kine-ginè-chane, confeſſes that we find in the Tcheou-li, the exiſtence of the book of three Hoang, and that of five Ti: but he adds, that we do not find there the names of theſe eight monarchs; that, under the Tſin, they ſpoke of Tiene-hoang, of Ti-hoang, and of Gine-hoang; that Cong-ngane-coue, in his preface to Chou-king, gives Fou-hi, Chine-nong, Hoang-ti, for the three Hoang, and that he takes Chao-hao, Tchouene-hio, Tico, Yao, and Chune for the five Ti; but that we know not on what foundation he does this, ſince Confucius, in the Kia-yu, diſtinguiſhes by the title of *Ti*, all the kings after Fou-hi. The ſame thing is proved by ſome paſſages of Tſo-chi and of Liu-pou ouei; from whence they conclude, that Fou-hi, Chine-nong, and Hoang-ti are not the three Hoang, and that there are no other Hoang but heaven, earth, and man.

Tchine-huene retrenches Hoang-ti from the number of the Sane-hoang, and puts in his place Niu-oua, whom he ranges between Fou-hi and Chine-nong. Others ſtrike out Niu-oua, and put Tcho-yong in the place of Hoang-ti. Niu-oua was the ſiſter of Fou-hi, and Fou-hi, they ſay, reigned 115 years. At what age muſt this princeſs have mounted the throne, for they make her ſucceed her brother?

The famous Sſe-ma-tſiene, to whom the Chineſe, from their high eſteem of him, have given the name of *Tai-ſſe-cong*, or *father of hiſtory*, will have Hoang-ti, Tchouene-hio, Cao ſine, Yao, and Chune to be the five Ti; and he gave theſe princes for their predeceſſors Soui-gine-chi, Fou-hi, and Chine-nong, who, according to him, were the three Hoang. This opinion, ſince his time, has been embraced by ſeveral other writers, who depended upon his authority more than upon proofs which he could not produce.

Confucius ſays in his Kia-yu, that the princes who had governed the empire, began at Fou-hi to take the name of *Ti* or Emperor. The ſame philoſopher ſays further, in the treatiſe Hi-tſee, or commentary upon the Y-king, that anciently Fou-hi governed China, that Chine-nong ſucceeded him, that after them Hoang-ti, Yao, and Chune were ſeated on the throne. From ſo deciſive a teſtimony, Hou-ou-fong, and ſeveral others with him, have not doubted, that theſe five princes named by Confucius, were the Ou-ti, or five emperors. As to the Sane-hoang, they admitted Tiene-hoang-chi, Ti-hoang-chi, Gine-hoang-chi, as three chiefs of the people who had governed the empire before Fou-hi.

As it is from Tao-ſſe, that the ſeveral authors we have now quoted, have borrowed their idea of this chimerical diviſion of the eight firſt Chineſe emperors, into three Hoang and five Ti, it is neceſſary to relate what theſe religious think themſelves. They have opinions peculiar to themſelves about theſe firſt ages of the monarchy. They believe, that at the firſt there were three Auguſti, Sane-hoang; then five emperors, Ou-ti; next three kings, Sane-vang; and laſtly, five Pa, Ou-pa; that is to ſay, five chiefs of Regulos.

This order ſo regularly obſerved of three and then five, which is repeated twice, ſhews plainly, that all this has no foundation in truth, but that it is a ſyſtem invented at pleaſure. Wherefore Ton-chong-chu, who lived under the Hanc, explained this in an allegorical manner. The three Hoang were, according to him, the three powers, (heaven, earth, and man); the five Ti were the five duties (the duties of king and ſubject, of father and children, of huſband and wife, of elder and younger brothers, of friends); the three Vang were the three lights, (ſun, moon, and ſtars); finally, the five Pa were the five mountains, four of which are ſituated at the four cardinal points of the empire, and the fifth at the centre. Thus, Tong-tchong-chu allegorized this pretended ſucceſſion of kings. But Lopi, who relates this explanation, adds, it was not his own. This is a point of criticiſm

ticiſm of little importance to us; let them, if they pleaſe, aſcribe it to ſome other than Tong-tchong-chu; we have ſtill ground to ſay, that it came from ſome writer who lived in an age not far from that of Tong-tchong-chu. This is enough for our preſent purpoſe, ſince we ſee from hence the little regard they then paid to this diviſion, which they conſidered as chimerical. It would be in vain to attempt to reconcile all theſe contradictions. All theſe imaginary reigns are in the manner of the Tao-ſſe, who have darkened the origin of the Chineſe monarchy by their fables and mythology. The ten Ki or periods are of their inventing; they give them between two and three millions of years duration. But before theſe ten periods, they place three dynaſties, viz. the dynaſty of Thiene-hoang-chi, that of Ti-hoang-chi, and finally, that of Gine-hoang-chi. If we attend to the ſignification of theſe names, they muſt be interpreted thus: the *Sovereign of heaven*, the *Sovereign of earth*, the *Sovereign of men*. We ſee from hence, that the allegorical explanation of Tong-tchong-chu, which made the three Hoang ſignify the three powers, that is, heaven, earth, and man, is not without probability.

Theſe three Hoang ſucceeded to Pouane-cou, otherwiſe Hoene-tune, the chaos, the origin of the world, which ſeveral of the Tao-ſſe take for the firſt man, or the firſt king who governed China.

The dynaſty of Thiene-hoang-chi had thirteen kings, who reigned, ſay they, 18,000 years; then came the dynaſty of Ti-hoang-chi, whoſe kings, to the number of eleven, make up a like duration of 18,000 years. Finally, to Ti-hoang-chi ſucceeded the Gine-hoang-chi, whoſe dynaſty, compoſed of nine kings, furniſhes a ſpace of 45,600 years. Theſe three ſums added, give us preciſely 81,600 years. But if we add to theſe three dynaſties, thoſe which are comprehended in each of the ten Ki, and which amount, according to ſome calculations, to more than 230; we ſhall find, that the pretenſions of the Chineſe very much exceed thoſe of the Chaldeans and Egyptians. For if we believe the calculations of various authors, from Pouane-cou to the

death of Confucius, which happened in the year 479 before J. C. there is elapſed 276,000 years, or 2,276,000, or 2,759,860, or even 3,276,000, or finally, which is a great deal more, 96,961,740 years: for we find all theſe different calculations.

It is viſible enough, that theſe extravagant numbers can be nothing elſe but aſtronomical periods, contrived to give the conjunction of the planets in certain conſtellations, or calculations which have ſome relation to the ideas of the Tao-ſſe, concerning the perpetual deſtructions and reproductions of worlds. In fact, ſome have endeavoured to make theſe numbers agree with the period of Tchao-cang-tſie, a famous philoſopher in the days of Song, who had undertaken to determine the period of the duration of the world; for the ſyſtem of the deſtruction and reproduction of worlds was very current, not only in the ſect of Ju or of the learned, but alſo among the Bonzes, Ho-chang or the religious of Fo, and among the Tao-ſſe or followers of Lao-kiune, that is to ſay, among the three great ſects, who have the moſt influence in the empire. Tchao-cang-tſie eſtabliſhed then a great period of 129,000 years, called *Yuene*, compoſed of twelve equal parts, called *hoei* or *conjunctions*, which were each of 10,800 years. In the firſt conjunction, ſaid he, heaven was formed by little and little, by the motion which the Tai-ki or the Supreme Being impreſſed upon matter which was formerly at perfect reſt. During the ſecond conjunction, the earth was produced in the ſame manner. At the middle of the third conjunction, man and all other beings began to ſpring up, in the manner that plants and trees are produced in the iſlands, which afterwards preſerve their ſeveral kinds by their ſeeds. At the middle of the eleventh conjunction, all things ſhall be deſtroyed, and the world ſhall fall back again into its primitive chaos, from whence it ſhall not ariſe till after the twelfth conjunction is expired.

It is not difficult at preſent to conceive, that the Tao-ſſe had invented that prodigious number of reigns before Fou-hi, for no other reaſon, but to fill up that interval, which, according

according to them, had elaſped from the production of man, to the beginning of the Chineſe monarchy, that is to ſay, to the reign of Fou-hi. The ſame calculator determined the half of Yuene, or of his great period of 129,000 years, at the reign of Yao.

Theſe Tao-ſſe, as I have ſaid already, laid down theſe ten ages or ten Ki as an indiſputable principle; each Ki comprehended ſeveral dynaſties, whoſe duration they determined as they thought fit, and as their caculation required: but it they were at liberty to increaſe or diminiſh the duration of the ten Ki, it was not the ſame as to their number, which was in ſome ſort a fundamental principle of their ſect, from which they were not allowed to depart.

Some miſſionaries to whom this doctrine of Tao-ſſe was not unknown, imagined, that they diſcerned in theſe ten Ki, the ten generations before Noah; and as the writers cited by Lopi, and by Cong-ing-ta, ſay, that of theſe ten Ki, ſix were before Fou-hi, and four after him; theſe ſame miſſionaries have imagined, that Fou-hi was Enoch. It muſt be owned, in the mean time, that Tchine-huene and ſeveral others do not obſerve the ſame order; that they place Chine-nong in the ninth Ki, Hoang-ti in the tenth, &c. By this computation Hoang-ti would be Noah, and Fou-hi Methuſelah, which contradicts their hypotheſis.

The opinion which conſiders the ten Ki of the Chineſe as the ten generations which preceded Noah, is very ingenious, and not improbable. Towards the end of the reign of Tcheou, about 300 years before the Chriſtian æra, ſome Jews travelled into China, who might have made the writings of Moſes known there, and, of conſequence, the ten generations which preceded the deluge: beſides, this knowledge was common to the Chaldeans, who might have penetrated into China before the Jews.

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Value and proportion of the French coins.

Denier equal to $\frac{1}{4}$ of a farthing Sterling.

						L.	s.	d.
2	Double.							
3	$1\frac{1}{2}$	Liard.						
12	6	4	Sol Paris is equal to			0	0	$\frac{1}{2}$
240	120	8	20	Livre acc.	-	0	0	$10\frac{1}{2}$
720	360	240	60	3	Ecu, crown	0	2	$7\frac{1}{2}$

The French royal foot in the Chatelet, is to the Engliſh foot from the ſtandard in Guildhall as 1068 to 1000.

French liquid meaſures at Paris are, to begin with the ſmalleſt, the poſſon, which contains ſix cubic inches. The demi-ſeptier, containing two poſſons. The ſeptier, or chopin. The pint, containing two chopins. The quart or pot containing, two pints. The gallon or ſeptier of eſtimation, containing four quarts; and the muid, containing thirty-ſix ſeptiers.

The litron at Paris is, by ordinance, to be three inches and an half high, and three inches ten lines broad; and their buſhel containing ſixteen litrons, is by ordinance to be eight inches two lines and an half high, and ten inches broad, or in diameter within ſide.

Table of weights at Paris.

Grains.					
24	Penny-weight.				
72	3	Groſs.			
576	24	8	Ounce.		
7008	192	64	8	Mark.	
9216	384	128	16	2	Pound.

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